

WHAT IS CLAIMED IS:

1. An Internet-based consumer product marketing, merchandising and education/information system which enables manufacturers, their agents, retailers and their agents, and consumers to carryout product-related functions along the demand side of the retail chain, comprising:

a central UPN/TM/PD/URL RDBMS for storing a central database of UPN/TM/PD/URL links;

a first subsystem for enabling a manufacturer's marketing, brand and/or product managers to create and manage a local database of UPN/TM/PD/URL links related to the consumer products of the manufacturer being offered for sale in both physical and/or electronic marketplaces, and periodically transport said local database of UPN/TM/PD/URL links to said central UPN/TM/PD/URL RDBMS by electronic data interchange techniques, said local database of UPN/TM/PD/URL links being managed with a local UPN/TM/PD/URL RDBMS, and selected by the manufacturer's marketing, brand and/or product managers so as to create a desired brand image for each said consumer product of the manufacturer;

a second subsystem for enabling consumers to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the demand side of the retail chain; and

one or more subsystems selected from the group consisting of:

a third subsystem for enabling manufacturers and their advertising and marketing agents to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to display consumer product advertisements to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to project the desired brand image to consumers; and

a fourth subsystem for enabling retailers and their marketing and promotional agents to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to promote consumer products to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to promote the sale of such products in inventory;

wherein said central UPN/TM/PD/URL RDBMS, said local UPN/TM/PD/URL RDBMS, and said first, second, third and fourth subsystems are each operably connected to the infrastructure of the Internet.

2. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem further enables retailer purchasing agents to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the supply side of the retail chain.

3. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem comprises one or more information access and display devices selected from the group consisting of:

a network of barcode-driven/touch-screen-enabled physical CPI kiosks are physically installed within physical retail environments using wireless Internet-connectivity enabling technology, and made accessible to retail shoppers in physical retail environments; and

a network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW (e.g. in EC-based retail stores and catalogs, on-line auction sites, Internet product advertisements), and made accessible to retail shoppers across the Internet.

4. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem further comprises a plurality of Web (http) information servers for driving said network of barcode-driven/touch-screen-enabled physical CPI kiosks.

5. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem further comprises a plurality of CPIR-enabling Applet servers for driving said network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW, including retailer-oriented WWW sites served to physical CPI kiosks in a retailer's store.

6. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said central UPN/TM/PD/URL RDBMS further includes a data processing/filtering subsystem for processing data contained within said central UPN/TM/PD/URL RDBMS so that each physical CPI kiosk connected to an enabling Web server (and deployed within a particular retailer's store) is capable of displaying only UPN/TM/PD/URL links created by manufacturer's who (i) sell products in the retailer's physical store and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's store shelves about which said physical CPI kiosk is physically installed.

7. The Internet-based consumer product marketing, merchandising and education/information system of claim 5, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating, for each UPN/TM/PD/URL link record in said central UPN/TM/PD/URL RDBMS, a CPIR-enabling Applet/Servlet, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by retailers, advertisers, auctioneers, et al, and subsequent embedment into the HTML-fabric of WWW.

8. The Internet-based consumer product marketing, merchandising and education/information system of claim 5, wherein said second subsystem comprises a data processing/filtering subsystem (e.g. modules of data processing scripts), integrated with said central UPN/TM/PD/URL RDBMS, for processing data within said central UPN/TM/PD/URL RDBMS so that each virtual CPI kiosk deployed within a particular retailer's electronic store and enabled by at least one said CPIR-enabling Applet server is capable of displaying only UPN/TM/PD/URL links created by manufacturer's who (i) sell products in the retailer's electronic store (i.e. e-store) and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's virtual shelves (e.g. Web pages) about which the virtual kiosk is installed within the HTML-fabric of the retailer's e-store.

9. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem comprises: one or more information servers for delivering a suite of information services to manufacturers (i.e. vendors) including, the downloading of and providing technical support for software-based EDI-enabled UPN/TM/PD/URL link creation, management and transport (LCMT) tools that are made available to registered manufacturers, and their agents, as well as to anyone else operating along the retain chain as a vendor of consumer products (which may also include retailers as well); and wherein said software-based EDI-enabled UPN/TM/PD/URL LCMT tools enable the manufacturer's marketing, brand and/or product managers (and their support personnel) to efficiently carry out UPN/TM/PD/URL data-linking and transport operations which are required to build and maintain said local database.

10. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem comprises a data processing/filtering subsystem for data processing (i.e. filtering) said UPN/TM/PD/URL links and data contained in said central UPN/TM/PD/URL RDBMS, in various ways prior to distribution to consumers, so as to preserve the trust, confidence and goodwill developed between manufacturers and retailers in both physical and electronic streams of commerce.

11. The Internet-based consumer product marketing, merchandising and education/information system of claim 10, wherein said data processing/filtering subsystem involves using information about (i) the manufacturers represented (or promoted) by a particular retailer in a particular retail environment, as well as (ii) the rights and/or privileges accorded to product manufacturers and/or distributors (i.e. vendors) by retailers with regard to displaying a manufacturer's product in a particular aisle of the retailer's store and optionally at a particular shelf location, as well as on a particular Web-page(s) of a retailer's electronic store or catalog (e.g. virtual aisles) and optionally at a particular location (i.e. virtual shelf location) therealong.

12. The Internet-based consumer product marketing, merchandising and education/information system of claim 9, wherein said software-based EDI-enabled

UPN/TM/PD/URL LCMT tools enable a manufacturer's marketing, brand and/or managers to create and manage a list of UPN/TM/PD/URL links for each consumer product within their product portfolio, store said list of UPN/TM/PD/URL links within said local database, realized as a locally managed UPN/TM/PD/URL RDBMS, and electronically transporting said list of UPN/TM/PD/URL links from said locally managed UPN/TM/PD/URL RDBMS to said central UPN/TM/PD/URL RDBMS, for distribution and display to consumers in the form of a UPN/TM/PD/URL link display GUI.

13. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said third subsystem enables an advertisers (including a retailer, a manufacturer or its agent) to buy advertising slots available on particular retailer-deployed barcode-driven physical CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short UPC-indexed product advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting consumer product related information from said system.

14. The Internet-based consumer product marketing, merchandising and education/information system of claim 13, wherein said third subsystem enables advertisers to perform one or more functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on manufacturer/retailer authorized kiosks; (iv) purchase advertisement slots on manufacturer/retailer authorized physical or virtual) CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

15. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said fourth subsystem enables a promoter (including a retailer, a manufacturer or its agent) to create customized product promotion campaigns, containing short UPC-indexed product advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven/touch-screen enabled physical CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-sale (POS) stations within the same retail stores in which the participating physical CPI kiosks are deployed.

16. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said fourth subsystem enables promoters to

perform one or more functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider purchasing or otherwise acquiring promotion slots on manufacturer/retailer authorized kiosks; (iv) purchase or otherwise acquire (product sales) promotion slots on manufacturer/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage product promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or manufacturers) in retail space; and (vi) monitor the performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

17. The Internet-based consumer product marketing, merchandising and education/information system of claim 9, wherein said software-based EDI-enabled UPN/TM/PD/URL LCMT tools are down-loaded to a plurality of users within the manufacturer's enterprise, so as to enable different users within different departments to link and manage predetermined categories of UPN/TM/PD/URL links within said local database.

18. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein the UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS are distributed over the Internet so as to enable one or more functions selected from the group consisting of: (i) consumers and end-users within physical retail environments having access to a plurality of physical CPI kiosks driven by a plurality of Web (http) servers operably connected to the infrastructure of the Internet; (ii) consumers and end-users within electronic retail environments having access to a plurality of virtual CPI kiosks driven by a plurality of CPIR-enabling Java Applet servers operably connected to the infrastructure of the Internet; and (iii) consumers and end-users interfaced with a plurality of Web-enabled client machines at home, school, in the office or on the road having access to a plurality of UPN-driven consumer product information portals on the WWW, driven by a plurality of mirrored http information servers operably connected to said central UPN/TM/PD/URL RDBMS.

19. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem further comprises one or more Web information servers are provided for serving up to the public, in different languages, WWW sites at which said central UPN/TM/PD/URL RDBMS is searchable by the public without the restriction of MIN and UPN data filters that might be maintained within retail shopping environments to preserve the goodwill embodied within manufacturer and retailer relationships along the retail chain.

20. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem further comprises a

5 GPS-time synchronized WAP-enabled information server for delivering consumer product information links from said central UPN/TM/PD/URL RDBMS to a GSU-enabled wireless Web-enabled palm computer carried by a consumer within a physical retail shopping space, when, for example, the palm computer is physically located within a particular portion of the physical retail shopping space.

10 21. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating a CPIR-enabling Applet/Servlet for each UPN/TM/PD/URL link record in the UPN/TM/PD/URL RDBMS, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling CPIR-enabling Applet Tag Catalog Web Server for enabling retailers, advertisers, auctioneers, et al to view CPIR-enabling Applet tags catalogued therein and download said CPIR-enabling Applet tags for embedment within the HTML-encoded fabric of the WWW.

15 22. An Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein the URLs linked to each UPN/TM/PD/URL information record maintained in said central UPN/TM/PD/URL RDBMS are organized for display to consumers in two different categories, namely: Pre-purchase Related CPI Links for informing and educating consumers, and Post-Purchase Related CPI Links for providing customers with product related service, instruction and technical support while promoting the retention of customers by such value-added services after the consumer purchase.

20 23. An Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein first subsystem enables manufacturers to perform one or more functions selected from the group consisting of: (1) supporting manufacturer registration operations; (2) downloading UPN/TM/PD/URL link creation; management and EDI-enabled transport (LCMT) software to registered manufacturers; (3) installing and setting up such software within the manufacturer's enterprise; (4) selecting and customizing the GUI Design for the UPN/TM/PD/URL link display menu filled by the UPN/TM/PD/URL link creation, collection, management and EDI-enabled transport software (e.g. including Manufacturer Customization Options, Default CPI Categories for linked URLs, Custom CPI Categories for linked URLs); (5) On-Line Training for UPN/TM/PD/URL Link Creation, Collection, Management and Transport Software; (6) Updating Manufacturer Registration Information; (7) Registering Manufacturer's Product Advertising Agents; and (8) Registering Manufacturer's Product Promotional Agents.

25 30 35 40 24. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem further comprises one or more EDI information servers operably connected to said central UPN/TM/PD/URL RDBMS

and the infrastructure of the Internet, for receiving the structured files of said local UPN/TM/PD/URL RDBMS locally managed within the manufacturer's enterprise using UPN/TM/PD/URL link creation, collection, management and EDI-enabled transport software downloaded from one or more of said information servers, and wherein one or more manufacturer-operated client subsystems run said UPN/TM/PD/URL LCMT software so as to enable marketing, brand and/or product managers to create and manage UPN/TM/PD/URL links with said local RDBMS, as well as transport said UPN/TM/PD/URL links contained therein to said central UPN/TM/PD/URL RDBMS using electronic data transport techniques.

25. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem further comprises one or more information servers for downloading to each manufacturer registered with said first subsystem, UPN/TM/PD/URL link creation, management and transport (LCMT) software for running on one or more manufacturer-operated/managed client computer subsystems, and wherein said UPN/TM/PD/URL LCMT software generates, on each said manufacturer-operated/managed client computer subsystem, a graphical user interface (GUI) which comprises a number of display structures selected from the group consisting of: a window-style framework having a toolbar menu along the upper portion of the framework and an information display window centrally disposed within the framework and having horizontal and vertical scroll bars respectively, for moving into view the UPN/TM/PD/URL link information about a UPN-indexed product registered in its local database; a Use Default URL Link Categories button for enabling the user to create a prespecified set of URL link data fields, organizable into pre-purchase and post-purchase types, into which active URL links can be entered manually, semi-automatically or automatically using the various techniques described hereinabove; a Create Custom URL Link Categories button for enabling the user to create a custom-designed set of URL link fields, organizable into, pre-purchased and post-purchase types, into which active URL links can be entered manually or using the semi-automated techniques; a Create URL Link button for enabling the user to enter URLs into the URL link categories established within said local database under construction; Manage (i.e. Edit) URL Link button for enabling the user to edit URLs entered into the URL link categories established within the local UPN/TM/PD/URL RDBMS under construction or management; a Transport UPN/TM/PD/URL RDBMS button for enabling the user to manually or automatically initiate/activate the transport of the locally-managed UPN/TM/PD/URL RDBMS to the centrally maintained UPN/TM/PD/URL RDBMS using EDI (e.g. ftp, XML, conventional EDI, etc.) processes; UPN/TM/PD/URL Link Record data field for displaying the UPN, trademarks, product descriptors, and URLs related to the consumer product assigned the UPN by the UPC manager of the manufacturer (or vendor); a UPN data field for displaying the UPN associated with a particular UPN/TM/PD/URL Link Record data field; a Trademark (i.e. brand name) data field for displaying the primary trademark associated with a particular UPN/TM/PD/URL Link Record data field; a Product Descriptor (PD) data field for displaying a generic product description or descriptor associated with a particular UPN/TM/PD/URL Link Record data field; a Pre-purchase URL Link Record for displaying a first plurality of Categorized URL Records, each Categorized URL Record

containing a Pre-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field; and a Post-purchase URL Link Record for displaying a second plurality of Categorized URL Records, each Categorized URL Record containing a Post-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field.

26. The Internet-based consumer product marketing, merchandising and education/information system of claim 25, wherein the data displayed within said GUI is obtained from the data tables comprising said central UPN/TM/PD/URL RDBMS, and the UPN, TM and PD data fields thereof are automatically populated with data imported from a UPC management RDBMS for maintaining a UPC Product Sales Catalog, during data importation and synchronization operations.

27. The Internet-based consumer product marketing, merchandising and education/information system of claim 25, wherein said UPN/TM/PD/URL LCMT software provides the manufacturer's marketing, brand and/or product managers with a wide range of choice in URL Link Category labeling, including a means for creating custom-designed URL Link Category labels, and means for producing a list of pre-designed Default URL Link Category label sets, each being specifically tailored to a particular segment and sector of the consumer product industry.

28. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein each physical and/or virtual CPI kiosk is provided with a graphical user interface (GUI) for visually displaying UPN/TM/PD/URL link records accessed from the UPN/TM/PD/URL RDBMS, and wherein said kiosk GUI comprises a number of display structures selected from the group consisting of: a scalable window-style framework having a toolbar menu along the upper portion of the framework and an information display window centrally disposed within the framework and having horizontal and vertical scroll bars, for displaying (i) UPN/TM/PD/URL link information about any UPN-indexed product registered in its local database in response to a UPN-directed search against the central UPN/TM/PD/URL RDBMS, and (ii) a list of UPN/TM/PD links returned from a trademark (TM) directed search, product directed (PD) search, or manufacturer's home-page (MHP) directed search made against said central UPN/TM/PD/URL RDBMS; a UPN-Directed Search button for enabling the user to initiate a UPN-directed search against the central UPN/TM/PD/URL RDBMS; a TM-Directed Search button for enabling the user to initiate a TM-directed search against said central UPN/TM/PD/URL RDBMS; a PD-Directed Search button for enabling the user to initiate a PD-directed search against said central UPN/TM/PD/URL RDBMS; a MHP-Directed Search button for enabling the user to initiate a MHP-directed search against said central UPN/TM/PD/URL RDBMS; UPN data field for displaying the UPN associated with a particular UPN/TM/PD/URL Link Record data field retrieved from said central UPN/TM/PD/URL RDBMS; a First Trademark (i.e. brand name) data field for displaying the

primary trademark associated with the particular UPN/TM/PD/URL Link Record data field; a Second Trademark (i.e. brand name) data field for displaying the secondary trademark associated with the particular UPN/TM/PD/URL Link Record data field; a Product Descriptor data field for displaying a generic product description or descriptor associated with the particular UPN/TM/PD/URL Link Record data field; a Pre-purchase URL Link Record for displaying a first plurality of Categorized URL Records, each Categorized URL Record containing a Pre-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field; and a Post-purchase URL Link Record for displaying a second plurality of Categorized URL Records, each Categorized URL Record containing a Post-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field.

29. An Internet-based consumer product marketing, merchandising and education/information system of claim 28, wherein when the manufacturer (or vendor) has decided to use the predesigned default URL Link Category labels for its UPN/TM/PD/URL link creation, management and transport GUI, as defined in claim 25, then the physical and virtual kiosk GUIs used to display the manufacturer's (or vendor's) UPN/TM/PD/URL links to consumers will use substantially the same predesigned Default URL Link Category labels to display URLs linked to the UPN/TM/PD/URL Link Records transported to said central UPN/TM/PD/URL RDBMS.

30. The Internet-based consumer product marketing, merchandising and education/information system of claim 28, wherein when the manufacturer (or vendor) has decided to use Custom (manufacturer-created) URL Link Category labels for its UPN/TM/PD/URL LCMT GUI, as defined in claim 25, then the physical and virtual kiosk GUIs used to display the manufacturer's (or vendor's) UPN/TM/PD/URL links to consumers will use the same custom-created URL Link Category labels to display URLs linked to particular UPN/TM/PD/URL Link Records.

31. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem enables retailers to perform one or more functions selected from the group consisting of: (1) supporting retailer (and e-retailer) and manufacturer registration operations; (2) updating and displaying the Kiosk Deployment Directory for the registered retailer or manufacturer; (3) enabling retailers to select and order physical and/or virtual kiosks for deployment, and manufacturers to select and order virtual kiosks for deployment by the manufacturer or others; (4) specifying the location of physical kiosk installation and deployment, and the domain of virtual kiosk installation and deployment; (5) selecting particular information services to be enabled on and delivered to ordered/deployed CPI kiosks in order to configure the same for its intended application; (6) selecting and customizing the kiosk GUI Design (as a further part of the kiosk configuration process); (7) registering the manufacturer's Aisle/Shelf Rights and Privileges on deployed CPI

kiosks; (8) registering the retailer's (or manufacturer's) advertising agents as the case may be; (9) registering the retailer's (or manufacturer's) product promotional agents as the case may be; (10) monitoring the performance of registered retailer (or manufacturer) advertising agents as the case may be; and (11) monitoring the performance of registered retailer (or manufacturer) promotional agents as the case may be.

32. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem enables retailers to perform one or more functions selected from the group consisting of: Registration of Retailer/Creation of Retailer Account; Log-in by Retailer; Update and Display Kiosk Deployment Directory; Select and Order Physical and Virtual Kiosks for Deployment; Specification of The Location/Domain of Kiosk Installation and Deployment; Selection of Information Services Delivered by Deployed CPI Kiosks; Selection and Customization of CPI Kiosk GUI Design; Registration of Manufacturer's Aisle/Shelf Rights and Privileges on CPI Kiosks; Registration of Retailer's Advertising Agents; Registration of Retailer's Product Promotional Agents; Monitor Performance of Registered Retailer Advertising Agent; and Monitor Performance of Registered Retailer Promotional Agent.

33. The Internet-based consumer product marketing, merchandising and education/information system of claim 33, wherein second subsystem wherein enables retailers to configure its physical CPI kiosks to have a graphical user interface (GUI) which displays a 2-D or 3-D computer graphics model for the aisle and shelf space disposed about the physical CPI kiosk and this computer graphics model is displayed through the physical kiosk GUI so that a consumer viewing the physical CPI kiosk, and the consumer products displayed thereabout, sees (on the touch-screen display screen of the kiosk) a virtual model of the surrounding aisle and shelf space and all of the brands of products displayed thereon.

34. The Internet-based consumer product marketing, merchandising and education/information system of claim 33, wherein each virtual product displayed through said GUI will carry its trademark (i.e. brand), and its location will spatially correspond to the location of its graphical image or icon with the virtual aisle/shelf model displayed on the physical CPI kiosk.

35. The Internet-based consumer product marketing, merchandising and education/information system of claim 33, wherein using said GUI, the consumer can access and display the UPN/TM/PD/URL link record associated with a particular consumer product by simply touching the graphical image or icon of a particular consumer product displayed on the touch-screen enabled physical CPI kiosk, and upon the display of the UPN/TM/PD/URL link record, the consumer can then select the URL links relating to types of information sought by the consumer.

36. The Internet-based consumer product marketing, merchandising and education/information system of 33, wherein the 2-D or 3-D computer graphics model of the physical shelf (and aisle) space about the physical CPI kiosk is created by the retailer or its agent using appropriate computer-graphic store aisle/shelf modeling software made accessible to the retailer or its agent by said second subsystem, and such computer graphic models are stored within said central UPN/TM/PD/URL RDBMS.

37. The Internet-based consumer product marketing, merchandising and education/information system of claim 35, wherein said second subsystem enables the retailer to register a manufacturer (i.e. vendor) aisle/shelf rights with respect to a particular physical CPI kiosk deployed in retail store.

38. The Internet-based consumer product marketing, merchandising and education/information system of claim 35, wherein said manufacturer (i.e. vendor) aisle/shelf rights registration is carried out using either a portable wireless bar code symbol reader to read the UPC or UPC/EAN labels on consumer products located on the physical shelves and/or in the physical aisles surrounding the physical CPI kiosk, or using either a portable wireless optical character reader to read the UPC or UPC/EAN labels on consumer products located on the physical shelves and in the physical aisles surrounding the physical CPI kiosk.

39. The Internet-based consumer product marketing, merchandising and education/information system of claim 38, wherein said portable wireless bar code reader or optical character reader is RF-linked to any particular physical CPI kiosk (but preferably to the one being programmed with manufacturer aisle/shelf rights/privileges), or the LAN to which the physical CPI kiosk is connected, and wherein said physical CPI kiosk has a manufacturer aisle/shelf right/privilege registration mode which can be selected on the physical CPI kiosk to which the bar code symbol reader or optical character reader is linked during manufacturer aisle/shelf right registration operations.

40. The Internet-based consumer product marketing, merchandising and education/information system of claim 39, wherein a UPC-directed method of registering manufacturer aisle/shelf rights/privileges is carried out by: (1) the retailer inducing the physical CPI kiosk into its Manufacturer Aisle/Shelf Rights/Privileges Registration Mode, in which the physical CPI kiosk is ready to be programmed with manufacturer identification numbers (MINs) against the physical CPI kiosk's identification number; and (2) the retailer reading the UPC symbol labels on different brands of consumer products on the shelves about the physical CPI kiosk, within and about the aisles thereof, so that such information can be transmitted back to said central UPN/TM/PD/URL RDBMS for processing.

42. The Internet-based consumer product marketing, merchandising and education/information system of claim 37, wherein said manufacturer (i.e. vendor) aisle/shelf rights registration is carried out by reading the UPNs on consumer products using at least one of

the methods in the group consisting of: (1) using ones eyes and then entering such information into the system by way of keyboard data entry operations; (2) using a bar code symbol reader with memory which subsequently downloaded to the UPN/TM/PD/URL RDBMS; and (3) using a bar code symbol reader RF-linked to the physical CPI kiosk being programmed, or to a central wireless network controller with IP-connectivity to the LAN to which the interfaced physical CPI kiosk is connected.

42. The Internet-based consumer product marketing, merchandising and education/information system of claim 41, wherein the UPNs inputted to said second subsystem are analyzed and the MINs parsed out therefrom to determine a list of manufacturers having aisle/shelf rights to the particular physical kiosk, thereby providing the corresponding kiosk with retailer authorization to subsequently accept product advertisement and promotion spot orders for display to consumer, and for manufacturers not having aisle/shelf rights/privileges to a particular physical CPI kiosk, such manufacturers and their advertising and promotional agents are permitted to place product advertisement and promotion spot orders to run on the particular CPI kiosk being programmed, thereby respecting aisle/shelf rights/privileges granted to particular manufacturers by particular retailers as part of their business agreements.

42. The Internet-based consumer product marketing, merchandising and education/information system of claim 37, wherein said second subsystem enables a TM-directed method of registering manufacturer aisle/shelf rights/privileges by using one or more techniques selected from the group consisting of: (1) the retailer inducing the physical CPI kiosk into its Manufacturer Aisle/Shelf Rights/Privileges Registration Mode so that the physical kiosk is ready to be programmed with manufacturer identification numbers (MINs) against the physical CPI kiosk's identification number; and (2) the retailer reading the trademark (or brand name) labels on different brands of consumer products on the shelves about the physical CPI kiosk, within and about the aisles thereof, and entering such information into the system (e.g. via virtual keyboard displayed on the CPI kiosk GUI during this state of programming) so that such information can be transmitted back to the UPN/TM/PD/URL RDBMS for processing.

43. The Internet-based consumer product marketing, merchandising and education/information system of claim 42, wherein said trademark reading operations can be carried using one or more techniques selected from the group consisting of: (1) using ones eyes and then entering such information into the system by way of keyboard data entry operations; (2) using an optical character reader with memory which subsequently downloaded to said central UPN/TM/PD/URL RDBMS; or (3) using an optical character reader RF-linked to the kiosk being programmed, or to a central wireless network controller with IP-connectivity to the LAN to which the interfaced physical CPI kiosk is connected.

44. The Internet-based consumer product marketing, merchandising and education/information system of claim 43, wherein the TMs inputted to said second subsystem are used to determine a list of manufacturers (identified by MIN) having aisle/shelf rights to the

particular CPI kiosk, thereby providing the corresponding physical CPI kiosk with retailer authorization to subsequently accept product advertisement and promotion spot orders for display to consumers, and for manufacturers not having aisle/shelf rights/privileges to a particular physical CPI kiosk, such manufacturers and their advertising and promotional agents are not permitted to place product advertisement and promotion spot orders to run on the particular CPI kiosk being programmed, thereby respecting aisle/shelf rights/privileges granted to particular manufacturers by particular retailers as part of their business agreements.

45. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem enables manufacturers to perform one or more functions selected from the group consisting of: Registration of Manufacturer/Creation of Manufacturer Account; Log-in by Manufacturer; Update and Display of Manufacturer's Virtual CPI Kiosk Deployment Directory; Select and Order Virtual CPI Kiosks for Deployment; Specification of The Domain of Virtual Kiosk Installation and Deployment; Selection of Information Services Delivered by Deployed Virtual CPI Kiosks; Selection and Customization of Virtual Kiosk GUI Design; Registration of Manufacturer's Virtual Aisle/Shelf Rights and Privileges on Virtual CPI Kiosks; Registration of Manufacturer's Advertising Agents Registration of Manufacturer's Product Promotional Agents; Monitor Performance of Registered Manufacturer Advertising Agent; and Monitor Performance of Registered Manufacturer Promotional Agent.

46. The Internet-based consumer product marketing, merchandising and education/information system of claim 45, wherein once logged-in to said second subsystem, the manufacturer may view one or more directories selected from the group consisting of: (i) a directory/catalog of the virtual UPN-restricted/product-specific CPI kiosks which are currently deployed on the WWW; and (ii) a directory of virtual UPN-restricted/product-specific CPI kiosks which may be deployed and install on the WWW by others who download the enabling CPIR-enabling Applet tags from the CPIR-enabling Applet Tag Server, and embed the tags in the HTML-fabric of the WWW at domains where the virtual kiosks are to be installed.

47. The Internet-based consumer product marketing, merchandising and education/information system of claim 45, wherein the manufacturer may choose to deploy multi-mode type virtual product-specific CPI kiosks to the general public so that advertisements and/or product promotions can be programmably displayed from the virtual kiosk when launched from its point of installation on the WWW.

48. The Internet-based consumer product marketing, merchandising and education/information system of claim 47, wherein a CPIR-enabling Applet enables each said multi-mode type virtual product-specific CPI kiosk, and one or more of said multi-mode type virtual product-specific CPI kiosks are designed to automatically launch at the time of displaying its host HTML document, thereby providing a kiosk GUI on which to display product advertisement and/or promotion spots about the manufacturer's product.

49. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said third subsystem enabling one or more information services selected from the group consisting of: (1) registering advertisers (e.g. agents of manufacturers and retailers) and the creating advertiser accounts; (2) logging into the subsystem as a registered advertiser; (3) displaying General Kiosk Advertising Directories and identifying CPI kiosks on which the advertiser is authorized to display advertisements on consumer products; (4) displaying Brand Kiosk Advertising Directories and identifying CPI kiosks on which the advertiser is authorized to display advertisements on a particular brand of consumer products; (5) registering Kiosk Advertising Campaigns to be displayed on a retailer-authorized (initially-unspecified) subnetwork of CPI kiosks; (6) building Kiosk Advertising Campaigns by placing advertisement spot orders to be run on a specified subnetwork of CPI kiosks; (10) running and displaying Kiosk Advertising Campaigns on the retailer-authorized subnetwork of CPI kiosks, (11) modifying Kiosk Advertising Campaigns, and (12) monitoring the performance of Kiosk Advertising Campaigns.

50. The Internet-based consumer product marketing, merchandising and education/information system of claim 49, wherein said third subsystem enables one or more information services selected from the group consisting of: Registration of Advertiser/Creation of Advertiser Account; Log-in by Advertiser; Display General Kiosk Advertising Directory Identifying CPI Kiosks on which the Advertiser is Authorized to Display Advertisements on Consumer Products; Display Brand Kiosk Advertising Directory Identifying CPI Kiosks on which the Advertiser is Authorized to Display Advertisements on a Particular Brand of Consumer Products; Register Kiosk Advertising Campaign to be displayed on a Retailer-Authorized Subnetwork of CPI Kiosks; Build Kiosk Advertising Campaign by Placing Ad spot Orders to be run on a Particular Subnetwork of CPI Kiosks; Run and Display Kiosk Advertising Campaign on Retailer-Authorized Subnetwork of CPI Kiosks; Modify Kiosk Advertising Campaign; and Monitor Performance of Kiosk Advertising Campaign.

51. The Internet-based consumer product marketing, merchandising and education/information system of claim 50, wherein once the registered advertiser logs into said third subsystem, the advertiser may display and view one or more kiosk advertising directories selected from the group consisting of: a General-type Kiosk Advertising Directory which can be used to identify CPI Kiosks on which the advertiser is authorized by retailers to display advertisements on consumer products; and a Brand-type Kiosk Advertising Directory which can be used to identify CPI kiosks on which the advertiser is authorized by retailers to display advertisements on a particular brand of consumer products.

52. The Internet-based consumer product marketing, merchandising and education/information system of claim 50, wherein said third subsystem employs a data processing method to generate a General Kiosk Advertising Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

53. The Internet-based consumer product marketing, merchandising and education/information system of claim 52, wherein said data processing method comprises: (1) transmitting a general kiosk advertisement directory request to an Advertisement Slot Marketing/Sales/Management Web server; (2) receiving and parsing this directory request to determine the advertiser's identification number; (3) using the data tables of said central UPN/TM/PD/URL RDBMS and the advertiser's identification number to determine the list of manufacturers (by their MINs) who have retained the identified advertiser as their agents; (4) determining, for each obtained MIN, the physical and virtual CPI kiosks on which the hosting retailers have authorized to place product advertisements; (5) using the ascertained MINs and manufacturer aisle/shelf rights/privileges recorded within said UPN/TM/PD/URL RDBMS to determine those physical and virtual CPI kiosks on which the advertiser may order advertisements about products of manufacturers who have been granted such rights/privileges, whereby this list of physical and virtual CPI kiosks is then compiled to produce the generalized kiosk advertisement directory for transmission to the requesting advertiser.

54. The Internet-based consumer product marketing, merchandising and education/information system of claim 50, wherein a data processing methods is used to generate a Brand Kiosk Advertising Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

55. The Internet-based consumer product marketing, merchandising and education/information system of claim 54, wherein said data processing comprises: (1) transmitting a brand kiosk advertisement directory request to an Advertisement Slot Marketing/Sales/Management Web server, said request including (i) the trademark(s) --brand name(s)-- of products to be covered in the kiosk advertising directory, and the (ii) the advertiser's identification number; (2) receiving and parsing this directory request to determine the trademark(s) of products to be covered in the kiosk advertising directory, and also the advertiser's identification number; (3) using the data tables in said central UPN/TM/PD/URL RDBMS and the advertiser's identification number to which consumer products carry such trademarks (i.e. brand names) and also the UPNs and MINs of the manufacturers of such trademarked (i.e. branded) products; (4) using the determined MINs to determine the list of physical and virtual CPI kiosks in which manufacturers identified by said MINs having aisle/shelf rights/privileges to display product advertisements; (5) using the list of ascertained CPI kiosks to compile the generalized kiosk advertisement directory for transmission to the requesting advertiser.

56. The Internet-based consumer product marketing, merchandising and education/information system of claim 51, wherein equipped with a kiosk advertising directory, the advertiser builds a kiosk advertising campaign by (1) placing an advertisement spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk advertising directory; (2) creating suitable product advertisements (i.e. digital content); and (3)

linking the created product advertisements to the advertisement spot order, within said central UPN/TM/PD/URL RDBMS.

5 57. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem delivers advertisement spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading each advertisement spot within a product advertising/promotion spot queue in a Web server; and (2) serving the advertisement spot from the product advertising/promotion spot queue, to the physical CPI kiosk indicated in the advertisement spot order being executed.

10 58. The Internet-based consumer product marketing, merchandising and education/information system of claim 57, wherein the price of each product advertising/promotion slot on a particular retailer CPI kiosk is based on several factors selected from the group consisting of: (1) the amount of consumer-activity (i.e. the number of consumer product information requests made/placed) at the particular kiosk over, for example, the preceding month or so, so that kiosks which are more frequently used to make consumer product information request will have higher advertising fees associated with advertising slots maintained in its advertising queue; and (2) the number of product advertising campaigns created and scheduled to run (on a given day) within a particular retail store.

15 59. The Internet-based consumer product marketing, merchandising and education/information system of claim 57, wherein said third subsystem automatically issues advertising fee credits to the advertiser's accounts if and when a product advertisement spot, once displayed during a randomly assigned product advertisement/promotion slot is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is not related to the manufacturer of the product about which the advertisement is being displayed.

20 60. The Internet-based consumer product marketing, merchandising and education/information system of claim 59, wherein no advertising fee credits will be issued to the advertiser's account if and when a product advertisement, once displayed during a randomly-opened product advertising/promotion slot, is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is related to the manufacturer whose product advertisement is being displayed.

25 30 35 40 61. The Internet-based consumer product marketing, merchandising and education/information system of claim 60, wherein if the purchased product advertisement, loaded into a purchased product advertisement slot within a particular kiosk's advertisement/promotion queue, is not displayed over the retailer's CPI kiosks when scheduled for display, then the price paid for the product advertisement is automatically refunded to the advertiser, or the scheduled product advertisement can be rescheduled by the advertiser for display on an alternative display date(s), in accordance with the advertiser's instructions.

5 62. The Internet-based consumer product marketing, merchandising and education/information system of claim 59, wherein once a kiosk advertising campaign has been ordered to run, the advertiser can enter the Modify Kiosk Advertising Campaign Mode of subsystem, wherein the advertiser is provided the opportunity to modify any one of its registered kiosk advertising campaigns, using a Web-enabled client computer subsystem.

10 63. The Internet-based consumer product marketing, merchandising and education/information system of claim 62, wherein once a kiosk advertising campaign has run or is running, the advertiser can enter the Monitor Kiosk Advertising Campaign Performance Mode of subsystem, and monitor the performance of any one of the advertiser's kiosk advertising campaigns, using a Web-based client computer.

15 64. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said fourth subsystem enables promoter to use one or more information services selected from the group consisting of: (1) registering promoters and the creating promoter accounts; (2) logging into the subsystem by promoter; (3) displaying General Kiosk Promotion Directories and identifying CPI kiosks on which the promoter is authorized to display promotions on consumer products; (4) displaying Brand Kiosk Promotion Directories and identifying CPI kiosks on which the promoter is authorized to display advertisements on a particular brand of consumer products; (5) registering Kiosk Promotion Campaigns to be displayed on an (initially-unspecified) retailer-authorized subnetwork of CPI kiosks; (6) building Kiosk Promotion Campaigns by placing promotion spot orders to be run on a specified subnetwork of CPI kiosks; (10) running and displaying kiosk promotion campaigns on the retailer-authorized subnetwork of CPI kiosks; (11) modifying kiosk promotion campaigns; and (12) monitoring the performance of kiosk promotion campaigns.

25 65. The Internet-based consumer product marketing, merchandising and education/information system of claim 64, wherein once the registered promoter logs into said third subsystem, the promoter may display and view one or more kiosk promotion directories selected from the group consisting of: a General-type Kiosk Promotion Directory which can be used to identify CPI Kiosks on which the advertiser is authorized by retailers to display promotions on consumer products; and a Brand-type Kiosk Promotion Directory which can be used to identify CPI kiosks on which the advertiser is authorized by retailers to display promotion on a particular brand of consumer products.

30 66. The Internet-based consumer product marketing, merchandising and education/information system of claim 64, wherein said third subsystem employs a data processing method to generate a General Kiosk Promotion Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

5 67. The Internet-based consumer product marketing, merchandising and education/information system of claim 66, wherein said data processing method comprises: (1) transmitting a general kiosk promotion directory request to an Promotion Slot Marketing/Sales/Management Web server; (2) receiving and parsing this directory request to determine the promoter's identification number; (3) using the data tables of said central UPN/TM/PD/URL RDBMS and the promoter's identification number to determine the list of manufacturers (by their MINs) who have retained the identified promoters as their agents; (4) determining, for each obtained MIN, the physical and virtual CPI kiosks on which the hosting retailers have authorized to place product promotions; (5) using the ascertained MINs and manufacturer aisle/shelf rights/privileges recorded within said central UPN/TM/PD/URL RDBMS to determine those physical and virtual CPI kiosks on which the promoter may order promotions about products of manufacturers who have been granted such rights/privileges, whereby this list of physical and virtual CPI kiosks is then compiled to produce the generalized kiosk promotion directory for transmission to the requesting advertiser.

10 68. The Internet-based consumer product marketing, merchandising and education/information system of claim 64, wherein a data processing methods is used to generate a Brand Kiosk Promotion Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

15 69. The Internet-based consumer product marketing, merchandising and education/information system of claim 70, wherein said data processing comprises: (1) transmitting a brand kiosk promotion directory request to an Promotion Slot Marketing/Sales/Management Web server, said request including (i) the trademark(s) --brand name(s)-- of products to be covered in the kiosk advertising directory, and the (ii) the promoter's identification number; (2) receiving and parsing this directory request to determine the trademark(s) of products to be covered in the kiosk promotion directory, and also the promoter's identification number; (3) using the data tables in said central UPN/TM/PD/URL RDBMS and the promoter's identification number to which consumer products carry such trademarks (i.e. brand names) and also the UPNs and MINs of the manufacturers of such trademarked (i.e. branded) products; (4) using the determined MINs to determine the list of physical and virtual CPI kiosks in which manufacturers identified by said MINs having aisle/shelf rights/privileges to display product advertisements; (5) using the list of ascertained CPI kiosks to compile the generalized kiosk promotion directory for transmission to the requesting advertiser.

20 70. The Internet-based consumer product marketing, merchandising and education/information system of claim 66, wherein equipped with a kiosk advertising directory, the advertiser builds a kiosk promotion campaign by (1) placing an promotion spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk promotion directory; (2) creating suitable product promotion (i.e. digital content); and (3) linking the created product promotion to the promotion spot order, within said central UPN/TM/PD/URL RDBMS.

5 72. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem delivers promotion spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading each promotion spot within a product advertising/promotion spot queue in a Web server; and (2) serving the promotion spot from the product advertising/promotion spot queue, to the physical CPI kiosk indicated in the promotion spot order being executed.

10 73. The Internet-based consumer product marketing, merchandising and education/information system of claim 72, wherein the price of each product advertising/promotion slot on a particular retailer CPI kiosk is based on several factors selected from the group consisting of: (1) the amount of consumer-activity (i.e. the number of consumer product information requests made/placed) at the particular kiosk over, for example, the preceding month or so, so that kiosks which are more frequently used to make consumer product information request will have higher promotion fees associated with promotion slots maintained in its advertising/promotion queue; and (2) the number of product promotion campaigns created and scheduled to run (on a given day) within a particular retail store.

15 74. The Internet-based consumer product marketing, merchandising and education/information system of 72, wherein said third subsystem automatically issues promotion fee credits to the promoter's accounts if and when a product promotion spot, once displayed during a randomly-assigned product advertisement/promotion slot is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is not related to the manufacturer of the product about which the promotion is being displayed.

20 75. The Internet-based consumer product marketing, merchandising and education/information system of claim 74, wherein no promotion fee credits will be issued to the promoter's account if and when a product promotion, once displayed during a randomly-opened product advertising/promotion slot, is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is related to the manufacturer whose product promotion is being displayed.

25 76. The Internet-based consumer product marketing, merchandising and education/information system of claim 74, wherein if the purchased product promotion, loaded into a purchased product promotion slot within a particular kiosk's advertisement/promotion queue, is not displayed over the retailer's CPI kiosks when scheduled for display, then the price paid for the product promotion is automatically refunded to the promoter, or the scheduled product promotion can be rescheduled by the promoter for display on an alternative display date(s), in accordance with the promoter's instructions.

77. The Internet-based consumer product marketing, merchandising and education/information system of claim 74, wherein once a kiosk promotion campaign has been ordered to run, the promoter can enter the Modify Kiosk Promotion Campaign Mode of said fourth subsystem, wherein the advertiser is provided the opportunity to modify any one of its registered kiosk promotion campaigns, using a Web-enabled client computer subsystem.

78. The Internet-based consumer product marketing, merchandising and education/information system of claim 77, wherein once a kiosk promotion campaign has run or is running, the promoter can enter the Monitor Kiosk Advertising Campaign Performance Mode of said fourth subsystem, and monitor the performance of any one of the promoter's kiosk promotion campaigns, using a Web-based client computer.

79. An Internet-based consumer product marketing, merchandising and education/information system, wherein when a consumer establishes contact with a physical multi-mode CPI kiosk hereof in a retailer's physical shopping environment, the consumer is shown consumer product related (CPI) information selected from the group consisting of: (1) a product advertisement ordered by the manufacturer of the product sold in the retailer's store, the advertising agent of the manufacturer, the retailer, or the retailer's advertising agent; and (2) a product promotion ordered by the retailer, the retailer's promotional agent, the manufacturer of the promoted product sold in the retailer's store, or the manufacturer's promotional agent.

80. The Internet-based consumer product marketing, merchandising and education/information system of claim 79, wherein the consumer can automatically interrupt the product advertisement or promotion by (i) scanning the UPC label on a consumer product using the physical kiosk's integrated bar code scanner, (ii) clicking on the CPI Request button on the physical kiosk's GUI, or (iii) touching the integrated touch-screen display panel of the physical CPI kiosk.

81. The Internet-based consumer product marketing, merchandising and education/information system of claim 79, wherein when a consumer establishes contact with a virtual multi-mode CPI kiosk hereof displayed in a virtual retail shopping environment, the consumer is shown consumer product related (CPI) information selected from the group consisting of: (1) a product advertisement ordered by the manufacturer of the product sold in the retailer's store, the advertising agent of the manufacturer, the retailer, or the retailer's advertising agent; and (2) a product promotion ordered by the retailer, the retailer's promotional agent, the manufacturer of the promoted product sold in the retailer's store, or the manufacturer's promotional agent.

82. The Internet-based consumer product marketing, merchandising and education/information system of claim 79, wherein the consumer can automatically interrupt the product advertisement or promotion by (i) clicking on the product advertisement or promotion, or (ii) clicking on the CPI Request button on the virtual kiosk's GUI.

5 83. The Internet-based consumer product marketing, merchandising and education/information system of claim 79, wherein a manufacturer's marketing, brand and/or product managers can project a coherent brand image of their products to consumers worldwide, substantially independent of the level of knowledge and skill of the retailers, advertising agents and promotional agents of the manufacturer. This translates to value to all those participating on the demand side of the retail chain.

10 84. An Internet-based consumer product marketing, merchandising and education/information system, wherein each CPI kiosk deployed therein has three primary modes of display operation, namely: a CPI Display Mode; Advertisement Spot Display Mode; and Promotion Spot Display Mode.

15 85. An Internet-based consumer product marketing, merchandising and education/information system, wherein a plurality of physical CPI kiosks having LCD panels are embedded within or supported upon the store shelving structures employed in retail stores, and each said physical CPI kiosk is configured and deployed as a multi-mode CPI kiosk having three primary modes of display operation, namely: a CPI Display Mode; Advertisement Spot Display Mode; and Promotion Spot Display Mode.

20 86. The Internet-based consumer product marketing, merchandising and education/information system of claim 85, wherein during said Advertisement Spot Display Mode of operation, advertisement spots, which have been loaded in the physical CPI kiosk's advertisement/promotion spot queue, are automatically displayed in the information display frame of the physical kiosk GUI during the kiosk's quiescent moments of operation (i.e. when consumers are not making CPI requests with the kiosk).

25 30 87. The Internet-based consumer product marketing, merchandising and education/information system of claim 87, wherein during said Promotion Spot Display Mode of operation, purchased promotion spots, which have been loaded into the physical CPI kiosk's advertisement/promotion spot queue, are automatically displayed in the information display frame of the physical kiosk GUI during the kiosk's quiescent moments of operation (i.e. when consumer are not making CPI requests).

35 88. The Internet-based consumer product marketing, merchandising and education/information system of claim 85, wherein at any instant in time, either an advertisement spot or promotion spot can be displayed within the information display frame of the kiosk GUI.

40 89. The Internet-based consumer product marketing, merchandising and education/information system of claim 88, wherein an advertisement or promotion spot displayed on a particular physical CPI kiosk will be related to a product or product brand of a manufacturer who has been granted aisle/shelf rights/privileges by the retailer, thereby ac

the right/privilege to display, or have displayed (by its agents), advertisements and/or promotions relating to the manufacturer's (i.e. vendor's) products.

5 90. The Internet-based consumer product marketing, merchandising and education/information system of claim 85 wherein any of the following conditions at the physical CPI kiosk can terminate the currently active Advertisement Spot Display Mode or the Promotion Spot Display Mode: touching the touch-screen display screen within its information display frame, within which the advertisement or promotion is displayed; manually selection a search mode selection button displayed in the horizontal control frame; or reading a bar code symbol label on a consumer product.

10 91. An Internet-based consumer product marketing, merchandising and education/information system, comprising a plurality of physical CPI kiosks, each said physical CPI kiosk having an LCD panel and being embedded within or supported upon the store shelving structures employed in retail stores, and wherein each said physical CPI kiosk is configured and deployed as a multi-mode type physical CPI kiosk, and the operation of each physical CPI kiosk is characterized by two or more of the following rules of operation: (1) if a consumer touches the information display frame on the touch-screen (i.e. interactive) GUI, then the physical CPI kiosk will automatically display a GUI, enabling the consumer to conduct a CPI search against the UPN/TM/PD/URL RDBMS; if a consumer manually selects any search mode selection button displayed in the control frame of the GUI, then the physical CPI kiosk will automatically display a corresponding search display screen in the information display frame (e.g. to enable a UPN-directed search, a TM-directed search, or a PD-directed search, or home-page(HP) directed-search, as a the case may be); if a consumer touches the (retail) sponsor frame at the top of the kiosk GUI, then the physical CPI kiosk will automatically display (within the information display frame) the home-page of the kiosk-hosting retailer, or some other preprogrammed; and if the a consumer reads a (UPC or UPC/EAN) bar code symbol label on a consumer product using the bar code symbol reader integrated within the physical CPI kiosk, then the physical CPI kiosk will automatically display a UPN/TM/PD/URL link menu within the information display frame, having an interactive display format; and if the physical CPI kiosk does not experience any consumer input within a predetermined time period (e.g. 30-45 seconds), then the physical CPI kiosk will automatically display (in its information display frame) the next product advertisement or promotion spot loaded within the advertisement/promotion spot queue of the Web server driving the physical CPI kiosk.

35 92. An Internet-Based Consumer Product Related Information Link Creation, Management and Transport System which enables a manufacturer's marketing, brand and/or managers to create and manage a list of UPN/TM/PD/URL links for each consumer product within their product portfolio, using UPN/TM/PD/URL link creation, management and transport software, wherein said list of UPN/TM/PD/URL links are stored within a locally managed UPN/TM/PD/URL RDBMS, and are electronically transported to a central UPN/TM/PD/URL

RDBMS, from which such link lists are distributed to consumer over the Internet and displayed on client machine in the form of an interactive UPN/TM/PD/URL link display GUI.

5 93. An Internet-Based Consumer Product Advertisement Marketing, Programming, Management and Delivery System enables advertisers of manufacturers and retailers to buy advertising slots on particular retailer-deployed physical barcode-driven CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short UPC-indexed product advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting CPI from the System.

10 94. An Internet-Based Consumer Product Advertisement Marketing, Programming, Management and Delivery System enables advertisers (e.g. employed by a particular manufacturer or retailer or working as an advertising agent therefor) to perform one or more product related functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site (e.g. at <http://www.brandkeydisplay.com>) maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on manufacturer/retailer authorized kiosks (e.g. at a price set by the user activity characteristics of the kiosk periodically measured by the http and/or Applet server enabling the same); (iv) purchase advertisement slots on manufacturer/retailer authorized physical or virtual CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

25 95. An Internet-Based Consumer Product Promotion Marketing, Programming, Management and Delivery System enables the retailer (e.g. sales manager) to create customized product promotion campaigns, containing short UPC-indexed product advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-sale (POS) stations within the same stores in which the participating CPI kiosks are deployed.

30 96. An Internet-Based Consumer Product Promotion Marketing, Programming, Management and Delivery System which enables promoters (e.g. employed by a particular retailer or manufacturer or working as a promotional agent therefor) to perform one or more product related functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider

5 purchasing or otherwise acquiring promotion slots on manufacturer/retailer authorized kiosks (e.g. at a price set by the user activity characteristics of the kiosk periodically measured by the http and/or Applet server enabling the same); (iv) purchase or otherwise acquire (product sales) promotion slots on manufacturer/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage product promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or manufacturers) in retail space; and (vi) monitor the performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

10 97. EDI-enabled UPN/TM/PD/URL RDBMS software, which is downloadable to a registered manufacturer and installable on a manufacturer-operated client machine within the manufacturer's enterprises, for the purpose of: (1) enabling a manufacturer' marketing, brand and/or product managers and their agents (contributing to the brand-images of their products) to create UPN/TM/PD/URL links in connection with their consumer products; (2) enabling the manufacturer' marketing, brand and/or product managers and their agents, to manage such brand-forming information links within a local UPN/TM/PD/URL RDBMS locally-maintained within each manufacturer's enterprise; and (3) enabling the manufacturer' marketing, brand and/or product managers and their agents to transport said local UPN/TM/PD/URL RDBMS to a centralized UPN/TM/PD/URL RDBMS for central management, processing and distribution to consumers over the Internet.

20 98. EDI-enabled UPN/TM/PD/URL RDBMS software which enables the manufacturer to electronically transport data records in its locally-managed UPN/TM/PD/URL RDBMS to a centralized UPN/TM/PD/URL RDBMS so as to enable distribution of its UPN/TM/PD/URL links to: (i) consumers and end-users within physical retail environments having access to a plurality of physical CPI serving kiosks driven by a plurality of Web (http) servers operably connected to the infrastructure of the Internet; (ii) consumers and end-users within electronic retail environments having access to a plurality of virtual CPI serving kiosks driven by a plurality of CPIR-enabling Java Applet servers operably connected to the infrastructure of the Internet; and (iii) consumers and end-users interfaced with a plurality of Web-enabled client machines at home, school, in the office or on the road having access to a plurality of UPN-driven consumer product information portals on the WWW, driven by a plurality of mirrored http information servers operably connected to the infrastructure of the Internet.

30 99. An Internet-based consumer product marketing, merchandising and education/information system, wherein one or more Web information servers are provided for serving up to the public, in different languages, WWW sites at which the entire UPN/TM/PD/URL RDBMS is searchable by the public without the restriction of MIN and UPN data filters that are maintained within retail shopping environments to preserve the goodwill embodied within manufacturer and retailer relationships along the retail chain.

100. A GPS-time synchronized WAP-enabled information server for the purpose of delivering consumer product information links from an UPN/TM/PD/URL RDBMS to a GSU-enabled wireless Web-enabled palm computer carried by a consumer within a physical retail shopping space, when, for example, the palm computer is physically located within a particular portion of the physical retail shopping space.

101. A CPIR-enabling Applet/Servlet Generator which is used to automatically generate a CPIR-enabling Applet/Servlet for each UPN/TM/PD/URL link record in an UPN/TM/PD/URL RDBMS, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of the plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by retailers, advertisers, auctioneers, et al.

102. An Internet-based consumer product information system, wherein the URLs linked to each UPN/TM/PD/URL information record maintained in the UPN/TM/PD/URL RDBMS is organized for display to consumers in two different categories, namely: Pre-purchase Related CPI Links which inform and educate consumers while incrementally driving demand for the product; and Post-Purchase Related CPI Links which provide customers with product related service, instruction and technical support while promoting the retention of customers by such value-added services after the consumer purchase.

103. A Consumer Product Related Information Link Creation, Management And Transport Subsystem which comprises a central UPN/TM/PD/URL RDBM, and a web-based manufacturer registration and UPN/TM/PD/URL link creation, management and transport (LCMT) server for (1) supporting manufacturer registration operations, (2) downloading UPN/TM/PD/URL link creation, management and EDI-enabled transport (LCMT) software described hereinabove to registered manufacturers, (3) installing and setting up such software within the manufacturer's enterprise, (4) selecting and customizing the GUI Design for the UPN/TM/PD/URL link display menu filled by the UPN/TM/PD/URL link creation, collection, management and EDI-enabled transport software (e.g. including Manufacturer Customization Options, Default CPI Categories for linked URLs, Custom CPI Categories for linked URLs), (5) On-Line Training for UPN/TM/PD/URL Link Creation, Collection, Management and Transport Software, (6) Updating Manufacturer Registration Information, (7) Registering Manufacturer's Product Advertising Agents, (8) Registering Manufacturer's Product Promotional Agents.

104. UPN/TM/PD/URL link creation, management and transport software for operation on a manufacturer-operated/managed client computer subsystem, and providing a graphical user interface (GUI) which comprises a number of display structures namely: a window-style framework having a toolbar menu along the upper portion of the framework and an information display window centrally disposed within the framework and having horizontal and vertical scroll bars respectively, for moving into view the UPN/TM/PD/URL link information about a UPN-indexed product registered in its locally-managed UPN/TM/PD/URL; a Use Default URL

Link Categories button for enabling the user to create a prespecified set of URL link data fields, organizable into pre-purchase and post-purchase types, into which active URL links can be entered manually, semi-automatically or automatically using the various techniques described hereinabove.

105. An UPN/TM/PD/URL RDBMS, wherein the UPN, TM and PD data fields are automatically populated with data imported from a UPC management RDBMS for maintaining a UPC Product Sales Catalog, during data importation and synchronization operations.

106. A graphical user interface (GUI) for either a physical and/or virtual CPI kiosk capable of visually displaying UPN/TM/PD/URL link records accessed from an UPN/TM/PD/URL RDBMS, and wherein the kiosk GUI comprises one or more display structures selected from the group consisting of: a scalable window-style framework having a toolbar menu along the upper portion of the framework and an information display window centrally disposed within the framework and having horizontal and vertical scroll bars, for displaying (i) UPN/TM/PD/URL link information about any UPN-indexed product registered in its locally-managed UPN/TM/PD/URL in response to a UPN-directed search against the central UPN/TM/PD/URL RDBMS, and (ii) a list of UPN/TM/PD links returned from a trademark (TM) directed search, or product directed (PD) search, made against the central UPN/TM/PD/URL RDBMS; a UPN-Directed Search button for enabling the user to initiate a UPN-directed search against the central UPN/TM/PD/URL RDBMS; a TM-Directed Search button for enabling the user to initiate a TM-directed search against the central UPN/TM/PD/URL RDBMS; a PD-Directed Search button for enabling the user to initiate a PD-directed search against the central UPN/TM/PD/URL RDBMS; UPN data field for displaying the UPN associated with a particular UPN/TM/PD/URL Link Record data field retrieved from the central UPN/TM/PD/URL RDBMS; a First Trademark (i.e. brand name) data field for displaying the primary trademark associated with the particular UPN/TM/PD/URL Link Record data field; a Product Descriptor data field for displaying a generic product description or descriptor associated with the particular UPN/TM/PD/URL Link Record data field; a Pre-purchase URL Link Record for displaying a first plurality of Categorized URL Records, each Categorized URL Record containing a Pre-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field; and a Post-purchase URL Link Record for displaying a second plurality of Categorized URL Records, each Categorized URL Record containing a Post-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field.

107. A physical CPI kiosk having a kiosk graphical user interface (GUI) which displays a 2-D or 3-D computer graphics model of the aisle and shelf space disposed about the physical CPI kiosk and this computer graphics model is displayed through the kiosk GUI so that a consumer viewing the physical CPI kiosk, and the consumer products displayed thereabout, sees (on the

touch-screen display screen of the kiosk) a virtual model of the surrounding aisle and shelf space and all of the brands of products displayed thereon.

108. A physical CPI kiosk, wherein each virtual product displayed through the kiosk GUI will carry its trademark (i.e. brand), and its location will spatially correspond to the location of its graphical image or icon with the virtual aisle/shelf model displayed on the physical kiosk.

109. A physical CPI kiosk GUI, wherein the consumer can access and display the UPN/TM/PD/URL link record associated with a particular consumer product by simply touching the graphical image or icon of a particular consumer product displayed on the touch-screen enabled physical CPI kiosk, and upon the display of the UPN/TM/PD/URL link record, the consumer can then select the URL links relating to types of information sought by the consumer.

110. A UPN-directed method of and system for registering manufacturer (i.e. vendor) aisle/shelf rights with respect to a particular physical CPI kiosk deployed in retail store using either a portable wireless bar code symbol reader to read the UPC or UPC/EAN labels on consumer products located on the physical shelves and/or in the physical aisles surrounding the physical CPI kiosk, or using either a portable wireless optical character reader to read the UPC or UPC/EAN labels on consumer products located on the physical shelves and in the physical aisles surrounding the physical CPI kiosk.

111. A method of registering manufacturer (i.e. vendor) aisle/shelf rights, wherein inputted UPNs are analyzed and the MINs parsed out therefrom to determine a list of manufacturers having aisle/shelf rights to the particular physical kiosk, thereby providing the corresponding kiosk with retailer authorization to subsequently accept product advertisement and promotion spot orders for display to consumers, and for manufacturers not having aisle/shelf rights/privileges to a particular physical CPI kiosk, such manufacturers and their advertising and promotional agents are not permitted to place product advertisement and promotion spot orders to run on the particular kiosk being programmed, thereby respecting aisle/shelf rights/privileges granted to particular manufacturers by particular retailers as part of their business agreements.

112. A TM-directed method of registering manufacturer aisle/shelf rights/privileges comprising the steps of: (1) inducing a physical CPI kiosk into its Manufacturer Aisle/Shelf Rights/Privileges Registration Mode so that the physical kiosk is ready to be programmed with manufacturer identification numbers (MINs) against the physical CPI kiosk's identification number; and (2) reading the trademark (or brand name) labels on different brands of consumer products on the shelves about the physical CPI kiosk, within and about the aisles thereof, and enters such information into the system (e.g. via virtual keyboard displayed on the kiosk GUI during this state of programming) so that such information can be transmitted back to the UPN/TM/PD/URL RDBMS for processing.

113. A method of for registering manufacturer aisle/shelf rights/privileges with regard to a physical CPI kiosk, wherein the inputted TMs are used to determine a list of manufacturers (identified by MIN) having aisle/shelf rights to the particular kiosk, thereby providing the corresponding physical kiosk with retailer authorization to subsequently accept product advertisement and promotion spot orders for display to consumers, and for manufacturers not having aisle/shelf rights/privileges to a particular physical CPI kiosk, such manufacturers and their advertising and promotional agents are not permitted to place product advertisement and promotion spot orders to run on the particular kiosk being programmed, thereby respecting aisle/shelf rights/privileges granted to particular manufacturers by particular retailers as part of their business agreements.

114. A system for generating a directory/catalog of virtual UPN-restricted/product-specific CPI kiosks which may be deployed and installed on the WWW by others who download enabling CPIR-enabling Applet tags from a CPIR-enabling Applet Tag Server, and embed the tags in the HTML-fabric of the WWW at domains where the virtual kiosks are to be installed.

115. A system for enabling a manufacturer to deploy a catalog of multi-mode type virtual product-specific kiosks to the general public so that advertisements and/or product promotions can be programmably displayed from the virtual kiosk when launched from its point of installation on the WWW, and each multi-mode type virtual product-specific kiosks is enabled by a CPIR-enabling Applet designed to automatically launch at the time of displaying its host HTML document, thereby providing a kiosk GUI on which to display product advertisement and/or promotion spots about the manufacturer's product.

116. A system for generating a General-type Kiosk Advertising Directory which can be used by an advertiser to identify CPI kiosks on which the advertiser is authorized by retailers to display advertisements on consumer products.

117. A system for generating a Brand-type Kiosk Advertising Directory which can be used by an advertiser to identify CPI kiosks on which the advertiser is authorized by retailers to display advertisements on a particular brand of consumer products.

118. A method of generating a General Kiosk Advertising Directory from data contained with an UPN/TM/PD/URL RDBMS, comprising the steps of: (1) transmitting a general kiosk advertisement directory request to an Advertisement Slot Marketing/Sales/Management Web server; (2) receiving and parsing this directory request to determine the advertiser's identification number; (3) using the data tables of the UPN/TM/PD/URL RDBMS and the advertiser's identification number to determine the list of manufacturers (by their MINs) who have retained the identified advertiser as their agents; (4) determining, for each obtained MIN, the physical and virtual CPI kiosks on which the hosting retailers have authorized to place product advertisements; (5) using the ascertained MINs and manufacturer aisle/shelf rights/privileges recorded within said UPN/TM/PD/URL RDBMS to determine those physical and virtual CPI

kiosks on which the advertiser may order advertisements about products of manufacturers who have been granted such rights/privileges, whereby this list of physical and virtual CPI kiosks is then compiled to produce the generalized kiosk advertisement directory for transmission to the requesting advertiser.

119. A method of generating a Brand Kiosk Advertising Directory from data contained with an UPN/TM/PD/URL RDBMS, comprising the steps of: (1) transmitting a brand kiosk advertisement directory request to an Advertisement Slot Marketing/Sales/Management Web server, said request including (i) the trademark(s)--brand name(s)-- of products to be covered in the kiosk advertising directory, and the (ii) the advertiser's identification number; (2) receiving and parsing this directory request to determine the trademark(s) of products to be covered in the kiosk advertising directory, and also the advertiser's identification number; (3) using the data tables in the UPN/TM/PD/URL RDBMS and the advertiser's identification number to which consumer products carry such trademarks (i.e. brand names) and also the UPNs and MINs of the manufacturers of such trademarked (i.e. branded) products; (4) using the determined MINs to determine the list of physical and virtual CPI kiosks in which manufacturers identified by said MINs having aisle/shelf rights/privileges to display product advertisements; (5) using the list of ascertained CPI kiosks to compile the generalized kiosk advertisement directory for transmission to the requesting advertiser.

120. An Internet-based consumer product marketing system, wherein equipped with a kiosk advertising directory, an advertiser builds a kiosk advertising campaign by: (1) placing an advertisement spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk advertising directory; (2) creating suitable product advertisements (i.e. digital content); and (3) linking the created product advertisements to the advertisement spot order, within the UPN/TM/PD/URL RDBMS.

121. An Internet-based consumer product marketing system, wherein the system delivers the advertisement spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading the advertisement spot within the product advertising/promotion spot queue on a Web server; and (2) serving the advertisement spot from the product advertising/promotion spot queue, to the physical CPI kiosk indicated in the advertisement spot order being executed.

122. An Internet-based consumer product marketing system, wherein the price of each product advertising/promotion slot on a particular retailer CPI kiosk is based on several factors selected from the group consisting of: (1) the amount of consumer-activity (i.e. the number of consumer product information requests made/placed) at the particular kiosk over, for example, the preceding month or so, so that kiosks which are more frequently used to make consumer product information request will have higher advertising fees associated with advertising slots maintained in its advertising queue; and (2) the number of product advertising campaigns created and scheduled to run (on a given day) within a particular retail store.

123. An Internet-based consumer product marketing system, wherein the system automatically issues advertising fee credits to the advertiser's accounts if and when a product advertisement spot, once displayed during a randomly-assigned/opened product advertisement/promotion slot is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is not related to the manufacturer of the product about which the advertisement is being displayed.

124. An Internet-based consumer product marketing system, wherein no advertising fee credits will be issued to the advertiser's account if and when a product advertisement, once displayed during a randomly-opened product advertising/promotion slot, is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is related to the manufacturer whose product advertisement is being displayed.

125. An Internet-based consumer product marketing system, wherein if the purchased product advertisement, loaded into a purchased product advertisement slot within a particular kiosk's advertisement/promotion queue, is not displayed over the retailer's CPI kiosks when scheduled for display, then the price paid for the product advertisement is automatically refunded to the advertiser, or the scheduled product advertisement can be rescheduled by the advertiser for display on an alternative display date(s), in accordance with the advertiser's instructions.

126. An Internet-based consumer product marketing system, wherein once a kiosk advertising campaign has been ordered to run, the advertiser can enter a Modify Kiosk Advertising Campaign Mode of the system, wherein the advertiser is provided the opportunity to modify any one of its registered kiosk advertising campaigns, using a Web-enabled client computer subsystem.

127. An Internet-based consumer product marketing system, wherein once a kiosk advertising campaign has run or is running, the advertiser can enter a Monitor Kiosk Advertising Campaign Performance Mode of the system, and monitor the performance of any one of the advertiser's kiosk advertising campaigns, using a Web-based client computer.

128. Another object of the present invention is to provide an Internet-based consumer product merchandising system, wherein the promoter may display and view two different kinds of directories, namely: a General Kiosk Promotion Directory which can be used to identify CPI kiosks on which the promoter is authorized to display promotions on consumer products; and a Brand Kiosk Promotion Directory which can be used to identify CPI Kiosks on which the promoter is authorized to display promotions on a particular brand of consumer products.

129. A method of generating a General Kiosk Promotion Directory for a registered promoter, from data contained with an UPN/TM/PD/URL RDBMS, comprising the steps of: (1) transmitting a general kiosk promotion directory request to the promotion spot marketing/sales/management web server, in which the request includes the promoter's

Identification number; (2) receiving and parsing this directory request to determine the promoter's identification number; (3) using the data tables of the UPN/TM/PD/URL RDBMS and the promoter's identification number to determine the list of manufacturers (by their MINs) who have retained the identified promoter as their agents; (4) determining, for each obtained MIN, the physical and virtual CPI kiosks on which the hosting retailers have authorized to place product promotions; (5) using the ascertained MINs and manufacturer aisle/shelf rights/privileges recorded within the UPN/TM/PD/URL RDBMS to determine those physical and virtual CPI kiosks on which the promoter may place promotions about products of manufacturers who have been granted such rights/privileges, whereby this list of physical and virtual CPI kiosks are then compiled to produce the generalized kiosk promotion directory for transmission to the requesting advertiser.

130. A method of generating a Brand Kiosk Promotion Directory for a registered promoter, from data contained with an UPN/TM/PD/URL RDBMS, comprising the steps of: (1) transmitting a brand kiosk promotion directory request to the promotion spot marketing/sales/management web (http) server, in which the request includes (i) the trademark(s) --brand name(s)-- of products to be covered in the kiosk promotion directory, and the (ii) the promoter's identification number; (2) receiving and parsing this directory request to determine the trademark(s) of products to be covered in the kiosk promotion directory, and also the promotion identification number; (3) using the data tables in the UPN/TM/PD/URL RDBMS and the promotion identification number to which consumer products carry such trademarks (i.e. brand names) and also the UPNs and MINs of the manufacturers of such trademarked (i.e. branded) products; (4) using the determined MINs to determine the list of physical and virtual CPI kiosks in which manufacturers identified by said MINs having aisle/shelf rights/privileges to display product promotions; (5) using the list of ascertained physical and virtual CPI kiosks to compile the generalized kiosk promotion directory for transmission to the requesting promoter, whereby this list of physical and virtual CPI kiosks are then compiled to produce the brand kiosk promotion directory for transmission to the requesting advertiser.

131. An Internet-based consumer product merchandising system, wherein equipped with a kiosk advertising directory, the advertiser builds a kiosk advertising campaign by (1) placing an advertisement spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk advertising directory; (2) creating suitable product advertisements (i.e. digital content); and (3) linking the created product advertisements to the advertisement spot order, within the UPN/TM/PD/URL RDBMS.

132. An Internet-based consumer product, merchandising system, wherein the system delivers product promotion spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading the promotion spot within a product advertising/promotion spot queue on a Web server; and (2) serving the product promotion spot from said product advertising/promotion spot queue, to the physical CPI kiosk indicated in the produce promotion spot order being executed.

5

133. An Internet-based consumer product merchandising system, wherein equipped with a kiosk advertising directory, the advertiser builds a kiosk advertising campaign by (1) placing an advertisement spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk advertising directory; (2) creating suitable product advertisements (i.e. digital content); and (3) linking the created product advertisements to the advertisement spot order, within the UPN/TM/PD/URL RDBMS.

10

134. An Internet-based consumer product merchandising system, wherein the system delivers the advertisement spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading the advertisement spot within a product advertising/promotion spot queue on a Web server; and (2) serving the advertisement spot from the product advertising/promotion spot queue, to the physical CPI kiosk indicated in the advertisement spot order being executed.

15

135. An Internet-based consumer product marketing and merchandising system, wherein the price of each product advertising/promotion slot on a particular retailer CPI kiosk is based on several factors, such as for example: (1) the amount of consumer-activity (i.e. the number of consumer product information requests made/placed) at the particular kiosk over, for example, the preceding month or so, so that kiosks which are more frequently used to make consumer product information request will have higher advertising fees associated with advertising slots maintained in its advertising queue; and (2) the number of product advertising campaigns created and scheduled to run (on a given day) within a particular retail store.

20

25

136. An Internet-based consumer product marketing and merchandising system, wherein the system automatically issues advertising fee credits to the advertiser's accounts if and when a product advertisement spot, once displayed during a randomly-assigned/opened product advertisement/promotion slot is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is not related to the manufacturer of the product about which the advertisement is being displayed.

30

35

137. An Internet-based consumer product marketing and merchandising system, wherein no advertising fee credits will be issued to the advertiser's account if and when a product advertisement, once displayed during a randomly-opened product advertising/promotion slot, is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is related to the manufacturer whose product advertisement is being displayed.

40

138. An Internet-based consumer product marketing and merchandising system, wherein if the purchased product advertisement, loaded into a purchased product advertisement slot within a particular kiosk's advertisement/promotion spot queue, is not displayed over the retailer's CPI kiosks when scheduled for display, then the price paid for the product advertisement is automatically refunded to the advertiser, or the scheduled product advertisement can be

rescheduled by the advertiser for display on an alternative display date(s), in accordance with the advertiser's instructions.

139. An Internet-based consumer product marketing and merchandising system, wherein once a kiosk advertising campaign has been ordered to run, the advertiser can enter the Modify Kiosk Advertising Campaign Mode of subsystem, wherein the advertiser is provided the opportunity to modify any one of its registered kiosk advertising campaigns, using a Web-enabled client computer subsystem.

140. An Internet-based consumer product marketing and merchandising system, wherein once a kiosk promotion campaign has run or is running, the promoter can enter the Monitor Kiosk Promotion Campaign Performance Mode of subsystem, and monitor the performance of any one of the promoter's kiosk promotion campaigns, using a Web-based client computer.

141. A retail interior structure, wherein a plurality of CPI kiosks, wherein each said CPI kiosk has a LCD panel and is embedded within or supported upon the store shelving structures employed in a retail store environment, and wherein each said CPI kiosk is configured and deployed as a multi-mode CPI kiosk, in which the operation of each multi-mode CPI kiosk is characterized by two or more of the following rules of operation selected from the group consisting of: (1) if a consumer touches the information display frame on the touch-screen (i.e. interactive) GUI, then the multi-mode CPI kiosk will automatically display a GUI, enabling the consumer to conduct a CPI search against an UPN/TM/PD/URL RDBMS; if a consumer manually selects any search mode selection button displayed in the control frame of the kiosk GUI, then the multi-mode CPI kiosk will automatically display a corresponding search display screen in the information display frame (e.g. to enable a UPN-directed search, a TM-directed search, or a PD-directed search, as the case may be); if a consumer touches the (retail) sponsor frame at the top of the kiosk GUI, then the CPI kiosk will automatically display (within the information display frame) the home-page of the kiosk-hosting retailer, or some other preprogrammed information resource; and if the a consumer reads a bar code symbol product label (UPC or UPC/EAN) on a consumer product using the bar code symbol reader integrated within the CPI kiosk, then the CPI kiosk will automatically display a UPN/TM/PD/URL link menu within the information display frame, having an interactive display format; and if the CPI kiosk does not experience any consumer input within a predetermined time period (e.g. 30-45 seconds), then the CPI kiosk will automatically display (in its information display frame) the next product advertisement or promotion spot loaded within the advertisement/promotion spot queue of the Web server driving the CPI kiosk.

142. A method of purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores

or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

143. A system for purchasing a consumer product over the Internet (e.g. WWW) comprising:
computing means for receiving an UPN-encoded CPIR-enabling Applet tag from an http information server,

HTML-code editing means for embedding said UPN-encoded CPIR-enabling Applet tag within the HTML-code of a consumer product advertisement,

wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

144. A method of accessing consumer product related information at points within HTML-encoded documents, at which Universal Product Number (UPN) encoded Java Applet tags are embedded so as to produce, when executed, consumer product information display enabling graphical user interfaces (CPID-enabling Java GUIs) for the convenience of consumers while shopping at electronic-commerce (EC) enabled stores, considering the placement of bids at on-line auction sites, or browsing product advertisements appearing on the World Wide Web.

145. A system for accessing consumer product related information at points within HTML-encoded documents, at which Universal Product Number (UPN) encoded Java Applet tags are embedded so as to produce, when executed, consumer product information display enabling graphical user interfaces (CPID-enabling Java GUIs) for the convenience of consumers while shopping at electronic-commerce (EC) enabled stores, considering the placement of bids at on-line auction sites, or browsing product advertisements appearing on the World Wide Web.

146. An Internet-based consumer product information collection, managing and delivery method, wherein for each consumer product registered within an UPN/URL database operably connected to the infrastructure of the Internet, there is created and stored, an interactive consumer product information request (CPIR) enabling Applet which, when executed upon the initiation of the consumer through a mouse-clicking operation, automatically causes a preassigned CPID-enabling GUI to be displayed at the consumer's point of presence in Cyberspace, revealing the results of a consumer product information display conducted upon the product identified by the UPN encoded within the executed CPIR-enabling Applet.

147. An Internet-based consumer product information collection, managing and delivery system, wherein for each consumer product registered within an UPN/URL database operably connected to the infrastructure of the Internet, there is created and stored, an interactive consumer product information request (CPIR) enabling Applet which, when executed upon the initiation of the consumer through a mouse-clicking operation, automatically causes a preassigned CPID-enabling Java GUI to be displayed at the consumer's point of presence in

Cyberspace, revealing the results of a consumer product information display conducted upon the product identified by the UPN encoded within the executed Applet.

5 148. An Internet-based consumer product information collection, managing and delivery method, wherein (1) the UPN assigned to a particular consumer product by the manufacturer and (2) the URL of the Java script running on the IPD server of the system are encoded within the CPIR-enabling Applet so that, upon execution of the Applet, a consumer product information display (CPID) Java GUI is automatically produced for the consumer's convenience.

10 149. An Internet-based consumer product information collection, managing and delivery system, wherein (1) the UPN assigned to a particular consumer product by the manufacturer and (2) the URL of the Java script running on the IPD server of the system are encoded within the CPIR-enabling Applet so that, upon execution of the Applet, a consumer product information display (CPID) Java GUI is automatically produced for the consumer's convenience.

15 150. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUI automatically displays a manufacturer-defined menu (i.e. list) of categorized URLs pointing to information resources on the Internet (e.g. WWW) relating to the consumer product identified by the UPN encoded within the CPIR-enabling Applet.

20 151. An Internet-based consumer product information collection, managing and delivery system, wherein the CPID-enabling Java GUI automatically displays a manufacturer-defined menu (i.e. list) of categorized URLs pointing to information resources on the Internet (e.g. WWW) relating to the consumer product identified by the UPN encoded within the CPIR-enabling Applet.

25 152. An Internet-based consumer product information collection, managing and delivery method, wherein CPIR-enabling Applets are created by the system administrator, loaded within the UPN/URL database management subsystem thereof, distributed to retailers; wholesalers, manufacturers, advertisers and others for embedding within HTML-encoded documents associated with EC-enabled stores, catalogs, Internet-based product advertisements, on-line auction sites, and other locations on the WWW where accurate consumer product related information is desired or required without leaving the point of presence on the WWW at which the consumer resides.

30 153. An Internet-based consumer product information collection, managing and delivery system, wherein CPIR-enabling Applets are created by the system administrator, the compiled code of said CPIR-enabling Applets are loaded onto an information server, and the CPIR-enabling Applet tags are distributed to retailers, wholesalers, manufacturers, advertisers and others for embedding within HTML-encoded documents associated with EC-enabled stores, catalogs, Internet-based product advertisements, on-line auction sites, and other locations on the

WWW where accurate consumer product related information (CPI) is desired or required without leaving the point of presence on the WWW at which the consumer resides.

154. An Internet-based consumer product information collection, managing and delivery method, wherein CPIR-enabling Applets are created, distributed, and embedded within a HTML-encoded document related to a particular consumer product, and subsequently executed by a consumer so as to access and display a manufacturer-defined menu (i.e. list) of categorized URLs pointing to product-related Web-documents.

155. An Internet-based consumer product information collection, managing and delivery system, wherein CPIR-enabling Applets are created, distributed, embedded within a HTML-encoded document related to a particular consumer product, and subsequently executed by a consumer so as to access and display a manufacturer-defined menu (i.e. list) of categorized URLs pointing to product-related Web-documents.

156. An Internet-based consumer product information collection, managing and delivery method, wherein the consumer initiating the execution of a particular CPIR-enabling Applet may be anyone desiring or requiring consumer product related information while interacting with the communication medium provided the Internet and its supported technologies.

157. An Internet-based consumer product information collection, managing and delivery system, wherein the consumer initiating the execution of a particular CPIR-enabling Applet may be anyone desiring or requiring consumer product related information while interacting with the communication medium provided the Internet and its supported technologies.

158. An Internet-based consumer product information collection, managing and delivery method, wherein a thumb-nail picture, arbitrary graphical object, predesignated CPIR-indicating icon, or hypertext-type link associated with a particular consumer product can be embedded within the CPRI-enabling Applet associated therewith, so as to enable the consumer to produce a CPID-enabling Java GUI upon encountering the same in an HTML-encoded document on the WWW.

159. An Internet-based consumer product information collection, managing and delivery system, wherein a thumb-nail picture, arbitrary graphical object, predesignated CPIR-indicating icon, or hypertext-type link associated with a particular consumer product can be embedded within the CPRI-enabling Applet associated therewith, so as to enable the consumer to produce a CPID-enabling Java GUI upon encountering the same in an HTML-encoded document on the WWW

160. An Internet-based consumer product information collection, managing and delivery method, wherein licensed users can download CPIR-enabling Applet tags from a CPIR-Enabling Applet Library to any client computer for eventual insertion within the HTML code of a

particular Web-document to be published on the Internet in accordance with the licensing arrangement between the contracting parties.

161. An Internet-based consumer product information collection, managing and delivery system wherein licensed users can download CPIR-enabling Applets from the CPIR-Enabling Applet Library to any client computer for eventual insertion within the HTML code of a particular Web-document to be published on the Internet in accordance with the licensing arrangement between the contracting parties.

162. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

163. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

164. An Internet-based consumer product information collection, managing and delivery system, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

165. A method of purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

166. A system for purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

167. A virtual CPI kiosk, enabled by a CPIR-enabling Applet that is launchable from predefined points of presence within an EC-enabled store, on-line product catalog or other type of WWW site, for enabling consumers (including retail purchasing agents) to quickly access and display at the predefined point of presence, an interactive menu of categorized URLs pointing to

consumer product related information resources published on the WWW and symbolically linked to the UPNs of consumer products within a centralized UPN/URL database management subsystem, by manufacturer and/or their agents.

168. An EC-enabled product catalog having a library of CPIR-enabling Applets embeddable within graphical images of consumer products in HTML-encoded documents and enabling, when executed, a UPN-directed search within the UPN/URL database management subsystem and the display of an interactive menu of categorized URLs pointing to consumer product related information resources published on the WWW and symbolically linked to the UPNs of consumer products within a centralized UPN/URL database management subsystem, by manufacturer and/or their agents.

169. An Internet-based electronic commerce (EC) enabled shopping system comprising:
an Internet information server connected to the infrastructure of the Internet and supporting the hypertext transmission protocol (http);
a Web-enabled client subsystem connected to the infrastructure of the Internet;
an EC-enabled WWW site comprising a plurality of interlinked HTML-encoded documents arranged and rendered to provide an electronic store environment for a consumer when served to said Web-enabled client subsystem,
wherein said electronic store environment presenting a plurality of products for purchase and sale by an EC-enabled payment method supported over the Internet,
wherein a Java Applet tag, associated with each said product, is embedded within at least one of said HTML-encoded documents displayed on said Web-enabled client subsystem, and each said Java Applet tag being associated with a Java Applet encoded with the universal product number (UPN) assigned to one said product, and
whereby, when the consumer selects one said Java Applet tag, the associated Java Applet is automatically executed, enabling a search to be conducted against a product information database hosted on an Internet database server connected to the Internet, and the results from the search displayed in a GUI served to said Web-enabled client subsystem.

170. An Internet-based method of electronic commerce (EC) enabled shopping comprising the steps of:

(a) operating an Internet information server connected to the infrastructure of the Internet and supporting the hypertext transmission protocol (http);

(b) operating a Web-enabled client subsystem connected to the infrastructure of the Internet;

(c) serving from said Internet information server, an EC-enabled WWW site comprising a plurality of interlinked HTML-encoded documents arranged and rendered to provide an electronic store environment for a consumer when served to said Web-enabled client subsystem,

wherein said electronic store environment presents a plurality of products for purchase and sale by an EC-enabled payment method supported over the Internet, and

wherein a Java Applet tag, associated with each said product, is embedded within at least one of said HTML-encoded documents displayed on said Web-enabled client subsystem, and each said Java Applet tag being associated with a Java Applet encoded with the universal product number (UPN) assigned to one said product;

(d) selecting one said Java Applet tag in one of said HTML-encoded documents, and executing the associated Java Applet so as to automatically enable a search to be conducted against a product information database hosted on an Internet database server connected to the Internet, and the results from the search displayed in a GUI served to said Web-enabled client subsystem.

171. A server-side CPIR-enabling Java Applet for execution on the server-side of an information network, comprising:

the UPN of the particular product on which a consumer product information search is to be carried out and the search results thereof displayed on a client subsystem;

Java classes required for performing a UPN-directed search on a RDBMS Server using one or more Java methods running natively on said Java Web Server, and producing a particular Java GUI on said client subsystem for displaying the results obtained from said UPN-directed search.

172. The server-side CPIR-enabling Java Applet of claim 168 which further comprises:

license-related information specifying the terms and conditions of the CPIR-enabling Servlet license and the conditions under which the CPIR-enabling servlet shall operate.

173. A client-side CPIR-enabling Java Applet for execution on the server-side of an information network, comprising:

the UPN of the particular product on which a consumer product information search is to be carried out and the search results thereof displayed on client subsystem; and

Java classes required for performing a UPN-directed search on a RDBMS server, and producing a particular Java GUI for displaying the results obtained from the UPN-directed search on said client subsystem.

174. The client-side CPIR-enabling Java Applet of claim 173 which further comprises:

license-related information specifying the terms and conditions of the CPIR-enabling Applet license and conditions under which the CPIR-enabling Applet shall operate.

175. A method of purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

176. A system for purchasing a consumer product over the Internet (e.g. WWW) comprising:
means for embedding a UPN-encoded CPIR-enabling Applet within the HTML-
code of a consumer product advertisement,

wherein the CPIR-enabling Applet when executed displays a categorized URL
menu containing one or more URLs pointing to one or more EC-enabled stores or on-line
catalogs on the WWW at which the consumer product identified by the encoded UPN can be
purchased and delivered to a particular address in physical space.

177. A method of accessing consumer product related information at points within HTML-
encoded documents, at which Universal Product Number (UPN) encoded Java Applets are
embedded so as to produce, when executed, consumer product information display enabling
graphical user interfaces (CPID-enabling Java GUIs) for the convenience of consumers while
shopping at electronic-commerce (EC) enabled stores, considering the placement of bids at on-
line auction sites, or browsing product advertisements appearing on the World Wide Web.

178. A system for accessing consumer product related information at points within HTML-
encoded documents, at which Universal Product Number (UPN) encoded Java Applets are
embedded so as to produce, when executed, consumer product information display enabling
graphical user interfaces (CPID-enabling Java GUIs) for the convenience of consumers while
shopping at electronic-commerce (EC) enabled stores, considering the placement of bids at on-
line auction sites, or browsing product advertisements appearing on the World Wide Web.

179. An Internet-based consumer product information collection, managing and delivery
method, wherein for each consumer product registered within the UPN/URL database of the
system, there is created and stored, an interactive consumer product information request (CPIR)
enabling Applet which, when executed upon the initiation of the consumer through a mouse-
clicking operation, automatically causes a preassigned CPID-enabling Java GUI to be displayed
at the consumer's point of presence in Cyberspace, revealing the results of a consumer product
information display conducted upon the product identified by the UPN encoded within the
executed Applet.

180. An Internet-based consumer product information collection, managing and delivery
system, wherein for each consumer product registered within the UPN/URL database of the
system, there is created and stored, an interactive consumer product information request (CPIR)
enabling Applet which, when executed upon the initiation of the consumer through a mouse-
clicking operation, automatically causes a preassigned CPID-enabling Java GUI to be displayed
at the consumer's point of presence in Cyberspace, revealing the results of a consumer product
information display conducted upon the product identified by the UPN encoded within the
executed Applet.

181. An Internet-based consumer product information collection, managing and delivery
method, wherein (1) the UPN assigned to a particular consumer product by the manufacturer and

(2) the URL of the Java script running on the IPD server of the system are encoded within the CPIR-enabling Applet so that, upon execution of the Applet, a consumer product information display (CPID) Java GUI is automatically produced for the consumer's convenience.

182. An Internet-based consumer product information collection, managing and delivery system, wherein (1) the UPN assigned to a particular consumer product by the manufacturer and (2) the URL of the Java script running on the IPD server of the system are encoded within the CPIR-enabling Applet so that, upon execution of the Applet, a consumer product information display (CPID) Java GUI is automatically produced for the consumer's convenience.

183. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUI automatically displays a manufacturer-defined menu (i.e. list) of categorized URLs pointing to information resources on the Internet (e.g. WWW) relating to the consumer product identified by the UPN encoded within the CPIR-enabling Applet.

184. An Internet-based consumer product information collection, managing and delivery system, wherein the CPID-enabling Java GUI automatically displays a manufacturer-defined menu (i.e. list) of categorized URLs pointing to information resources on the Internet (e.g. WWW) relating to the consumer product identified by the UPN encoded within the CPIR-enabling Applet.

185. An Internet-based consumer product information collection, managing and delivery method, wherein CPIR-enabling Applets are created by the system administrator, loaded within the UPN/URL database management subsystem thereof, distributed to retailers, wholesalers, manufacturers, advertisers and others for embedding within HTML-encoded documents associated with EC-enabled stores, catalogs, Internet-based product advertisements, on-line auction sites, and other locations on the WWW where accurate consumer product related information is desired or required without leaving the point of presence on the WWW at which the consumer resides.

186. An Internet-based consumer product information collection, managing and delivery system, wherein CPIR-enabling Applets are created by the system administrator, loaded within the UPN/URL database management subsystem thereof, distributed to retailers, wholesalers, manufacturers, advertisers and others for embedding within HTML-encoded documents associated with EC-enabled stores, catalogs, Internet-based product advertisements, on-line auction sites, and other locations on the WWW where accurate consumer product related information is desired or required without leaving the point of presence on the WWW at which the consumer resides.

187. An Internet-based consumer product information collection, managing and delivery method, wherein CPIR-enabling Applets are created, distributed, embedded within a HTML-

encoded document related to a particular consumer product, and subsequently executed by a consumer so as to access and display a manufacturer-defined menu (i.e. list) of categorized URLs pointing to product-related Web-documents.

188. An Internet-based consumer product information collection, managing and delivery system, wherein CPIR-enabling Applets are created, distributed, embedded within a HTML-encoded document related to a particular consumer product, and subsequently executed by a consumer so as to access and display a manufacturer-defined menu (i.e. list) of categorized URLs pointing to product-related Web-documents.

189. An Internet-based consumer product information collection, managing and delivery method, wherein the consumer initiating the execution of a particular CPIR-enabling Applet may be anyone desiring or requiring consumer product related information while interacting with the communication medium provided the Internet and its supported technologies.

190. An Internet-based consumer product information collection, managing and delivery system, wherein the consumer initiating the execution of a particular CPIR-enabling Applet may be anyone desiring or requiring consumer product related information while interacting with the communication medium provided the Internet and its supported technologies.

191. An Internet-based consumer product information collection, managing and delivery method, wherein a thumb-nail picture, arbitrary graphical object, predesignated CPIR-indicating icon, or hypertext-type link associated with a particular consumer product can be embedded within the CPRI-enabling Applet associated therewith, so as to enable the consumer to produce a CPID-enabling Java GUI upon encountering the same in an HTML-encoded document on the WWW.

192. An Internet-based consumer product information collection, managing and delivery system, wherein a thumb-nail picture, arbitrary graphical object, predesignated CPIR-indicating icon, or hypertext-type link associated with a particular consumer product can be embedded within the CPRI-enabling Applet associated therewith, so as to enable the consumer to produce a CPID-enabling Java GUI upon encountering the same in an HTML-encoded document on the WWW.

193. An Internet-based consumer product information collection, managing and delivery method, wherein licensed users can download CPIR-enabling Applets from the CPIR-Enabling Applet Library to any client computer for eventual insertion within the HTML code of a particular Web-document to be published on the Internet in accordance with the licensing arrangement between the contracting parties. Such end-use applications might be in EC-enabled retail product catalogs, EC-enabled wholesale/trade catalogs, Internet-based product advertisements, and the like.

Ex Note
Rule 1.12e

194
195

195. An Internet-based consumer product information collection, managing and delivery system, wherein licensed users can download CPIR-enabling Applets from the CPIR-Enabling Applet Library to any client computer for eventual insertion within the HTML code of a particular Web-document to be published on the Internet in accordance with the licensing arrangement between the contracting parties. Such end-use applications might be in EC-enabled retail product catalogs, EC-enabled wholesale/trade catalogs, Internet-based product advertisements, and the like.

195. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

196. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

197. An Internet-based consumer product information collection, managing and delivery system, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

198. A system for purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

199. A cyber-kiosk, launchable from predefined points of presence within an EC-enabled store, on-line product catalog or other type of WWW site, for enabling consumers (including retail purchasing agents) to quickly access and display at the predefined point of presence, an interactive menu of categorized URLs pointing to consumer product related information resources published on the WWW and symbolically linked to the UPNs of consumer products within a centralized UPN/URL database management subsystem, by manufacturer and/or their agents.

200. An EC-enabled product catalog having a library of CPIR-enabling Applets embeddable within graphical images of consumer products in HTML-encoded documents and enabling, when executed, a UPN-directed search within the UPN/URL database management subsystem and the display of an interactive menu of categorized URLs pointing to consumer product related

information resources published on the WWW and symbolically linked to the UPNs of consumer products within a centralized UPN/URL database management subsystem, by manufacturer and/or their agents.

201. An Internet-based electronic commerce (EC) enabled shopping system comprising:

an Internet information server connected to the infrastructure of the Internet and supporting the hypertext transmission protocol (http);

a Web-enabled client subsystem connected to the infrastructure of the Internet;

an EC-enabled WWW site comprising a plurality of interlinked HTML-encoded documents arranged and rendered to provide an electronic store environment for a consumer when served to said Web-enabled client subsystem,

wherein said electronic store environment presenting a plurality of products for purchase and sale by an EC-enabled payment method supported over the Internet,

wherein a Java Applet tag, associated with each said product, is embedded within at least one of said HTML-encoded documents displayed on said Web-enabled client subsystem, and each said Java Applet tag being associated with a Java Applet encoded with the universal product number (UPN) assigned to one said product, and

whereby, when the consumer selects one said Java Applet tag, the associated Java Applet is automatically executed, enabling a search to be conducted against a product information database hosted on an Internet database server connected to the Internet, and the results from the search displayed in a GUI served to said Web-enabled client subsystem.

202. An Internet-based method of electronic commerce (EC) enabled shopping comprising the steps of:

(a) operating an Internet information server connected to the infrastructure of the Internet and supporting the hypertext transmission protocol (http);

(b) operating a Web-enabled client subsystem connected to the infrastructure of the Internet;

(c) serving from said Internet information server, an EC-enabled WWW site comprising a plurality of interlinked HTML-encoded documents arranged and rendered to provide an electronic store environment for a consumer when served to said Web-enabled client subsystem,

wherein said electronic store environment presents a plurality of products for purchase and sale by an EC-enabled payment method supported over the Internet, and

wherein a Java Applet tag, associated with each said product, is embedded within at least one of said HTML-encoded documents displayed on said Web-enabled client subsystem, and each said Java Applet tag being associated with a Java Applet encoded with the universal product number (UPN) assigned to one said product;

(d) selecting one said Java Applet tag in one of said HTML-encoded documents, and executing the associated Java Applet so as to automatically enable a search to be conducted against a product information database hosted on an Internet database server connected to the

Internet, and the results from the search displayed in a GUI served to said Web-enabled client subsystem.

203. A server-side CPIR-enabling Java Applet for execution on the server-side of an information network, comprising:

the UPN of the particular product on which a consumer product information search is to be carried out and the search results thereof displayed on a client subsystem;

Java classes required for performing a UPN-directed search on a RDBMS Server using one or more Java methods running natively on said Java Web Server, and producing a particular Java GUI on said client subsystem for displaying the results obtained from said UPN-directed search.

204. The server-side CPIR-enabling Java Applet of claim 30 which further comprises: license-related information specifying the terms and conditions of the CPIR-enabling Servlet license and the conditions under which the CPIR-enabling servlet shall operate.

205. A client-side CPIR-enabling Java Applet for execution on the server-side of an information network, comprising:

the UPN of the particular product on which a consumer product information search is to be carried out and the search results thereof displayed on client subsystem; and

Java classes required for performing a UPN-directed search on a RDBMS server, and producing a particular Java GUI for displaying the results obtained from the UPN-directed search on said client subsystem.

206. The client-side CPIR-enabling Java Applet of claim 32 which further comprises: license-related information specifying the terms and conditions of the CPIR-enabling Applet license and conditions under which the CPIR-enabling Applet shall operate.

207. A method of accessing and displaying consumer product related information to consumers on the Internet without disturbing the point of presence thereof on the WWW, said method comprising the steps of:

(a) creating a UPC-encoded Consumer Product Information (CPIR) enabling Applet for each consumer product registered within a UPN/URL database management system;

(b) encapsulating the HTML tag of each CPIR-enabling Applet within a separate, executable HTML tag encapsulation file, and then storing these encapsulation files in said UPN/URL database management system;

(c) publishing the CPIR-Enabling Apple Library available over the WWW to enable review thereof by retailers purchasing products from an e-commerce enabled product catalog webmasters of on-line auctioneers, advertisers desiring to link consumer product information to Web-based product advertisements, on-line electronic stock trading sites, or anyone else having a legitimate purpose of disseminating such information within the stream of e-commerce (EC);

(d) enabling retailers, auctioneers and advertisers to download selected HTML tag encapsulation files from said CPIR-Enabling Apple Library onto a local computer system for storage and subsequent use;

(e) extracting the CPIR-enabling Applet tag from a downloaded HTML tag encapsulation file, and then embedding it within an HTML-encoded document associated with, for example, an EC-enabled store, on-line auction site, product advertisement, electronic stock trading site, Internet search engine or directory, or the like; and

(f) upon browsing a HTML document on the WWW that has been encoded with a CPIR-enabling Applet tag (and linked to an identifiable logo or graphic image), the consumer need only perform a single mouse-clicking operation on the graphic image associated therewith to automatically execute the underlying CPIR-enabling Applet, thereby causing a UPC-directed search to be performed against said manufacturer-defined UPN/URL Database, and the results thereof displayed in an independent GUI, without disturbing the consumer's point of presence on the WWW.

208. A method of purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

209. A system for purchasing a consumer product over the Internet (e.g. WWW) comprising:
means for embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement,
wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

210. A method of accessing consumer product related information at points within HTML-encoded documents, at which Universal Product Number (UPN) encoded Java Applets are embedded so as to produce, when executed, consumer product information display enabling graphical user interfaces (CPID-enabling Java GUIs) for the convenience of consumers while shopping at electronic-commerce (EC) enabled stores, considering the placement of bids at on-line auction sites, or browsing product advertisements appearing on the World Wide Web.

211. A system for accessing consumer product related information at points within HTML-encoded documents, at which Universal Product Number (UPN) encoded Java Applets are embedded so as to produce, when executed, consumer product information display enabling graphical user interfaces (CPID-enabling Java GUIs) for the convenience of consumers while

shopping at electronic-commerce (EC) enabled stores, considering the placement of bids at on-line auction sites, or browsing product advertisements appearing on the World Wide Web.

5 212. An Internet-based consumer product information collection, managing and delivery method, wherein for each consumer product registered within the UPN/URL database of the system, there is created and stored, an interactive consumer product information request (CPIR) enabling Applet which, when executed upon the initiation of the consumer through a mouse-clicking operation, automatically causes a preassigned CPID-enabling Java GUI to be displayed at the consumer's point of presence in Cyberspace, revealing the results of a consumer product information display conducted upon the product identified by the UPN encoded within the executed Applet.

10 213. An Internet-based consumer product information collection, managing and delivery system, wherein for each consumer product registered within the UPN/URL database of the system, there is created and stored, an interactive consumer product information request (CPIR) enabling Applet which, when executed upon the initiation of the consumer through a mouse-clicking operation, automatically causes a preassigned CPID-enabling Java GUI to be displayed at the consumer's point of presence in Cyberspace, revealing the results of a consumer product information display conducted upon the product identified by the UPN encoded within the executed Applet.

20 214. An Internet-based consumer product information collection, managing and delivery method, wherein (1) the UPN assigned to a particular consumer product by the manufacturer and (2) the URL of the Java script running on the IPD server of the system are encoded within the CPIR-enabling Applet so that, upon execution of the Applet, a consumer product information display (CPID) Java GUI is automatically produced for the consumer's convenience.

25 215. An Internet-based consumer product information collection, managing and delivery system, wherein (1) the UPN assigned to a particular consumer product by the manufacturer and (2) the URL of the Java script running on the IPD server of the system are encoded within the CPIR-enabling Applet so that, upon execution of the Applet, a consumer product information display (CPID) Java GUI is automatically produced for the consumer's convenience.

30 216. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUI automatically displays a manufacturer-defined menu (i.e. list) of categorized URLs pointing to information resources on the Internet (e.g. WWW) relating to the consumer product identified by the UPN encoded within the CPIR-enabling Applet.

35 217. An Internet-based consumer product information collection, managing and delivery system, wherein the CPID-enabling Java GUI automatically displays a manufacturer-defined menu (i.e. list) of categorized URLs pointing to information resources on the Internet (e.g.

WWW) relating to the consumer product identified by the UPN encoded within the CPIR-enabling Applet.

5 218.. An Internet-based consumer product information collection, managing and delivery method, wherein CPIR-enabling Applets are created by the system administrator, loaded within the UPN/URL database management subsystem thereof, distributed to retailers, wholesalers, manufacturers, advertisers and others for embedding within HTML-encoded documents associated with EC-enabled stores, catalogs, Internet-based product advertisements, on-line auction sites, and other locations on the WWW where accurate consumer product related information is desired or required without leaving the point of presence on the WWW at which the consumer resides.

10 219. An Internet-based consumer product information collection, managing and delivery system, wherein CPIR-enabling Applets are created by the system administrator, loaded within the UPN/URL database management subsystem thereof, distributed to retailers, wholesalers, manufacturers, advertisers and others for embedding within HTML-encoded documents associated with EC-enabled stores, catalogs, Internet-based product advertisements, on-line auction sites, and other locations on the WWW where accurate consumer product related information is desired or required without leaving the point of presence on the WWW at which the consumer resides.

15 220. An Internet-based consumer product information collection, managing and delivery method, wherein CPIR-enabling Applets are created, distributed, embedded within a HTML-encoded document related to a particular consumer product, and subsequently executed by a consumer so as to access and display a manufacturer-defined menu (i.e. list) of categorized URLs pointing to product-related Web-documents.

20 221. An Internet-based consumer product information collection, managing and delivery system, wherein CPIR-enabling Applets are created, distributed, embedded within a HTML-encoded document related to a particular consumer product, and subsequently executed by a consumer so as to access and display a manufacturer-defined menu (i.e. list) of categorized URLs pointing to product-related Web-documents.

25 222. An Internet-based consumer product information collection, managing and delivery method, wherein the consumer initiating the execution of a particular CPIR-enabling Applet may be anyone desiring or requiring consumer product related information while interacting with the communication medium provided the Internet and its supported technologies.

30 223. An Internet-based consumer product information collection, managing and delivery system, wherein the consumer initiating the execution of a particular CPIR-enabling Applet may be anyone desiring or requiring consumer product related information while interacting with the communication medium provided the Internet and its supported technologies.

224. An Internet-based consumer product information collection, managing and delivery method, wherein a thumb-nail picture, arbitrary graphical object, predesignated CPIR-indicating icon, or hypertext-type link associated with a particular consumer product can be embedded within the CPRI-enabling Applet associated therewith, so as to enable the consumer to produce a CPID-enabling Java GUI upon encountering the same in an HTML-encoded document on the WWW.

225. An Internet-based consumer product information collection, managing and delivery system, wherein a thumb-nail picture, arbitrary graphical object, predesignated CPIR-indicating icon, or hypertext-type link associated with a particular consumer product can be embedded within the CPRI-enabling Applet associated therewith, so as to enable the consumer to produce a CPID-enabling Java GUI upon encountering the same in an HTML-encoded document on the WWW

226. An Internet-based consumer product information collection, managing and delivery method, wherein licensed users can download CPIR-enabling Applets from the CPIR-Enabling Applet Library to any client computer for eventual insertion within the HTML code of a particular Web-document to be published on the Internet in accordance with the licensing arrangement between the contracting parties. Such end-use applications might be in EC-enabled retail product catalogs, EC-enabled wholesale/trade catalogs, Internet-based product advertisements, and the like.

227. An Internet-based consumer product information collection, managing and delivery system, wherein licensed users can download CPIR-enabling Applets from the CPIR-Enabling Applet Library to any client computer for eventual insertion within the HTML code of a particular Web-document to be published on the Internet in accordance with the licensing arrangement between the contracting parties. Such end-use applications might be in EC-enabled retail product catalogs, EC-enabled wholesale/trade catalogs, Internet-based product advertisements, and the like.

228. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

229. An Internet-based consumer product information collection, managing and delivery method, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

230. An Internet-based consumer product information collection, managing and delivery system, wherein the CPID-enabling Java GUIs enabled by executed CPIR-enabling Applets can function as CPI-serving cyber-kiosks that can be installed at virtually location in Cyberspace for the convenience of consumers residing therewithin without disturbing their point of presence.

231. A method of purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

232. A system for purchasing a consumer product over the Internet (e.g. WWW) comprising the steps of: embedding a UPN-encoded CPIR-enabling Applet within the HTML-code of a consumer product advertisement, wherein the CPIR-enabling Applet when executed displays a categorized URL menu containing one or more URLs pointing to one or more EC-enabled stores or on-line catalogs on the WWW at which the consumer product identified by the encoded UPN can be purchased and delivered to a particular address in physical space.

233. A cyber-kiosk, launchable from predefined points of presence within an EC-enabled store, on-line product catalog or other type of WWW site, for enabling consumers (including retail purchasing agents) to quickly access and display at the predefined point of presence, an interactive menu of categorized URLs pointing to consumer product related information resources published on the WWW and symbolically linked to the UPNs of consumer products within a centralized UPN/URL database management subsystem, by manufacturer and/or their agents.

234. An EC-enabled product catalog having a library of CPIR-enabling Applets embeddable within graphical images of consumer products in HTML-encoded documents and enabling, when executed, a UPN-directed search within the UPN/URL database management subsystem and the display of an interactive menu of categorized URLs pointing to consumer product related information resources published on the WWW and symbolically linked to the UPNs of consumer products within a centralized UPN/URL database management subsystem, by manufacturer and/or their agents.

235. An Internet-based electronic commerce (EC) enabled shopping system comprising:
an Internet information server connected to the infrastructure of the Internet and supporting the hypertext transmission protocol (http);
a Web-enabled client subsystem connected to the infrastructure of the Internet;
an EC-enabled WWW site comprising a plurality of interlinked HTML-encoded documents arranged and rendered to provide an electronic store environment for a consumer when served to said Web-enabled client subsystem,

wherein said electronic store environment presenting a plurality of products for purchase and sale by an EC-enabled payment method supported over the Internet,

wherein a Java Applet tag, associated with each said product, is embedded within at least one of said HTML-encoded documents displayed on said Web-enabled client subsystem, and each said Java Applet tag being associated with a Java Applet encoded with the universal product number (UPN) assigned to one said product, and

whereby, when the consumer selects one said Java Applet tag, the associated Java Applet is automatically executed, enabling a search to be conducted against a product information database hosted on an Internet database server connected to the Internet, and the results from the search displayed in a GUI served to said Web-enabled client subsystem.

236. An Internet-based method of electronic commerce (EC) enabled shopping comprising the steps of:

(a) operating an Internet information server connected to the infrastructure of the Internet and supporting the hypertext transmission protocol (http);

(b) operating a Web-enabled client subsystem connected to the infrastructure of the Internet;

(c) serving from said Internet information server, an EC-enabled WWW site comprising a plurality of interlinked HTML-encoded documents arranged and rendered to provide an electronic store environment for a consumer when served to said Web-enabled client subsystem,

wherein said electronic store environment presents a plurality of products for purchase and sale by an EC-enabled payment method supported over the Internet, and

wherein a Java Applet tag, associated with each said product, is embedded within at least one of said HTML-encoded documents displayed on said Web-enabled client subsystem, and each said Java Applet tag being associated with a Java Applet encoded with the universal product number (UPN) assigned to one said product,

(d) selecting one said Java Applet tag in one of said HTML-encoded documents, and executing the associated Java Applet so as to automatically enable a search to be conducted against a product information database hosted on an Internet database server connected to the Internet, and the results from the search displayed in a GUI served to said Web-enabled client subsystem.

237. A server-side CPIR-enabling Java Applet for execution on the server-side of an information network, comprising:

the UPN of the particular product on which a consumer product information search is to be carried out and the search results thereof displayed on a client subsystem;

Java classes required for performing a UPN-directed search on a RDBMS Server using one or more Java methods running natively on said Java Web Server, and producing a particular Java GUI on said client subsystem for displaying the results obtained from said UPN-directed search.

238. The server-side CPIR-enabling Java Applet of claim 237 which further comprises:
license-related information specifying the terms and conditions of the CPIR-enabling
Servlet license and the conditions under which the CPIR-enabling servlet shall operate.

239. A client-side CPIR-enabling Java Applet for execution on the server-side of an
information network, comprising:

the UPN of the particular product on which a consumer product information search is to
be carried out and the search results thereof displayed on client subsystem; and

Java classes required for performing a UPN-directed search on a RDBMS server, and
producing a particular Java GUI for displaying the results obtained from the UPN-directed
search on said client subsystem.

240. The client-side CPIR-enabling Java Applet of claim 239 which further comprises:
license-related information specifying the terms and conditions of the CPIR-enabling
Applet license and conditions under which the CPIR-enabling Applet shall operate.

241. A method of accessing and displaying consume product related information to
consumers on the Internet without disturbing the point of presence thereof on the WWW, said
method comprising the steps of:

(a) creating a UPC-encoded Consumer Product Information (CPIR) enabling Applet for
each consumer product registered within a UPN/URL database management system;

(b) encapsulating the HTML tag of each CPIR-enabling Applet within a separate,
executable HTML tag encapsulation file, and then storing these encapsulation files in said
UPN/URL database management system;

(c) publishing the CPIR-Enabling Apple Library available over the WWW to enable
review thereof by retailers purchasing products from an e-commerce enabled product catalog
webmasters of on-line auctioneers, advertisers desiring to link consumer product information to
Web-based product advertisements, on-line electronic stock trading sites, or anyone else having a
legitimate purpose of disseminating such information within the stream of e-commerce (EC);

(d) enabling retailers, auctioneers and advertisers to download selected HTML tag
encapsulation files from said CPIR-Enabling Apple Library onto a local computer system for
storage and subsequent use;

(e) extracting the CPIR-enabling Applet tag from a downloaded HTML tag encapsulation
file, and then embedding it within an HTML-encoded document associated with, for example, an
EC-enabled store, on-line auction site, product advertisement, electronic stock trading site,
Internet search engine or directory, or the like; and

(f) upon browsing a HTML document on the WWW that has been encoded with a CPIR-
enabling Applet tag (and linked to an identifiable logo or graphic image), the consumer need
only perform a single mouse-clicking operation on the graphic image associated therewith to
automatically execute the underlying CPIR-enabling Applet,

thereby causing a UPC-directed search to be performed against said manufacturer-defined UPN/URL Database, and the results thereof displayed in an independent GUI, without disturbing the consumer's point of presence on the WWW.

5 242. An IP-based network installed in a publishing organization and Internet-based system comprising:

10 a plurality of publisher-operated client computer subsystems connected to said IP-based network, for enabling different departments within said publishing organization to manage different types of UPN/URL links based on the type of information contained within the URL-specified information resource on the WWW and within the UPN-specified section of an article of print media.

15 243. The Internet-based system of claim 242, wherein each said publisher-operated computer-based publishing system enables the electronic layout of: (i) a Web-based publication having different content and advertising sections associated with each Web-page thereof and each such Web-page being located on the WWW at a particular URL; and (ii) a print-media based publication having different content sections and advertising sections associated with each printed-page thereof; wherebetween each such content section and advertising section is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content or advertising section on the corresponding Web-page.

20 244. The Internet-based system of claim 243, wherein each said publisher-operated computer-based publishing system enables the electronic layout of: (i) a Web-based publication having different content and advertising sections associated with each Web-page thereof and each such Web-page being located on the WWW at a particular URL; and (ii) a print-media based publication having different content sections and advertising sections associated with each printed-page thereof; wherebetween each such content section and advertising section is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content or advertising section on the corresponding Web-page.

25 245. The Internet-based system of claim 244, wherein each said computer-based publishing subsystem is capable of automatically generating UPN/URL data link tables listing the URLs of each Web page symbolically linked to UPN assigned to a corresponding printed media page, and that such UPN/URL data link tables are transportable to a UPN/URL database management subsystem using electronic data interchange techniques, thereby enabling consumers (e.g. readers) to link from print-media to corresponding Web-based media using the UPNs printed on documents.

30 246. An Internet-based consumer product information system for use in a retail shopping environment, comprising:
35 an e-mail server; and
40

5 a plurality of Web-enabled bar code driven consumer product information kiosks deployed within a retail shopping environment, and each said Web-enabled bar code driven consumer product information kiosk embodying e-mail messaging capabilities which enable consumers to automatically save and link CPI-related Web documents as individual attachments to a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

10 247. The Internet-based consumer product information system of claim 246, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

15 248. The Internet-based consumer product information system of claim 246 which further comprises:

20 a central e-mail server for collecting copies of e-mail documents or transmitted from the Web/e-mail enabled kiosks within said retail shopping environment.

25 249. The Internet-based consumer product information system of claim 248, which further comprises a relational data base management subsystem (RDBMS) for use in analyzing compiling and storing data contained within said central e-mail server, and for making such information accessible to retailers and manufacturers alike for use in product marketing, sales forecasting, customer intelligence, and like operations.

30 250. An Internet-based consumer product information system for use in a retail shopping environment, comprising:

an e-mail server; and

35 a plurality of Web-enabled bar code driven consumer product information kiosks deployed within a retail shopping environment, and each said Web-enabled bar code driven consumer product information kiosk embodies e-mail messaging capabilities which enable consumers to automatically save and record the URLs of CPI-related Web documents within the message field of a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

40 251. The Internet-based consumer product information system of claim 250, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

252. The Internet-based consumer product information system of claim 250 which further comprises:

a central e-mail server for collecting copies of e-mail documents (and records thereof) transmitted from the Web/e-mail enabled kiosks within said retail shopping environment.

253. The Internet-based consumer product information system of claim 252, which further comprises a relation data base management subsystem for use in analyzing compiling and storing data contained within said central e-mail server, and for making such information accessible to retailers and manufacturers alike for use in product marketing, sales forecasting, customer intelligence, and like operations which enable more effective marketing of consumer products and services in both physical and electronic forms of commerce.

254. An Internet-based information system, comprising:

an IP-based network installed in a retail shopping environment and connected to the infrastructure of the Internet by way of an IP-based router; and

a plurality of publisher-operated client subsystems connected to said IP-based network, for the purpose of enabling different departments within the publishing organization (e.g. advertising, world news, business, technology, sports, finance, education, arts and leisure, etc.) to manage different types of UPN/URL links based on the type of information contained within the URL-specified information resource on the WWW.

255. The Internet-based information system of claim 253, wherein each said publisher-operated client subsystem has a publishing software program having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said computer-based publishing software program simultaneously enables the composition and edition a Web-based document and corresponding a print-media based document.

256. The Internet-based information system of claim 254, wherein said publishing software program has a split-screen GUI having left-side and right-side display frames, wherein the layout of said Web-based document is displayed in said left-side display frame of said split-screen GUI, and said print-media based document is displayed on said right-side display frame of said split-screen GUI.

257. The Internet-based information system of claim 254, wherein said publishing software program generates, during said UPN/URL data linking mode, a UPN/URL data link table indicating the symbolic links established between particular content sections within said Web-based document and particular content sections within said print-media based document.

258. The Internet-based information system of claim 256, wherein said publishing software program supports electronic data interchange functionalities for transporting said UPN/URL data link table to a UPN/URL database management subsystem.

5

259. The Internet-based information system of claim 255, wherein said left-side display frame has a first set of independent scroll bars, and said right-side display frame has a second set of independent scroll bars, thereby facilitating alignment of corresponding sections during said composition/editorial mode of operation and said UPN/URL data linking mode of operation.

10

260. The Internet-based information system of claim 255, wherein during said UPN/URL data linking mode of operation, each content section in said Web-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section in said corresponding Web-page located at a specified URL.

15

261. The Internet-based information system of claim 255, wherein said Web-based document also includes one or more advertising sections and said corresponding print-based document also includes one or more advertising sections, and wherein at least one of said content sections in said print-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section on said corresponding Web-based document.

20

262. The Internet-based information system of claim 260, wherein at least one of said advertising sections in said print-based document is assigned a UPN which is symbolically linked to a URL in at least one Web-based document published on the Internet.

25

263. The Internet-based information system of claim 252 which further comprises a network information server on said IP-network for maintaining a secure firewall.

30

264. An Internet-based client subsystem for operation by a publisher of print-media based documents and Web-based documents, comprising:
a computing platform; and
a publishing software program for executing on said computing platform, and having a composition/editing mode of operation and a UPN/URL data-linking mode of operation, wherein said publishing software program simultaneously enables the composition and edition a Web-based document and corresponding a print-media based document.

35

265. The Internet-based client subsystem of claim 263, wherein said publishing software program has a split-screen GUI having left-side and right-side display frames, wherein the layout of said Web-based document is displayed in said left-side display frame of said split-screen GUI, and said print-media based document is displayed on said right-side display frame of said split-screen GUI.

40

266. The Internet-based client subsystem of claim 264, wherein said publishing software program generates, during said UPN/URL data linking mode, a UPN/URL data link table indicating the symbolic links established between particular content sections within said Web-based document and particular content sections within said print-media based document.

267. The Internet-based client subsystem of claim 265, wherein said publishing software program supports electronic data interchange functionalities for transporting said UPN/URL data link table to a UPN/URL database management subsystem.

268. The Internet-based client subsystem of claim 264, wherein said left-side display frame has a first set of independent scroll bars, and said right-side display frame has a second set of independent scroll bars, thereby facilitating alignment of corresponding sections during said composition/editorial mode of operation and said UPN/URL data linking mode of operation.

269. The Internet-based client subsystem of claim 264, wherein during said UPN/URL data linking mode of operation, each content section in said Web-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section in said corresponding Web-page located at a specified URL.

270. The Internet-based client subsystem of claim 264, wherein said Web-based document also includes one or more advertising sections and said corresponding print-based document also includes one or more advertising sections, and wherein at least one of said content sections in said print-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section on said corresponding Web-based document.

271. The Internet-based client subsystem of claim 269, wherein at least one of said advertising sections in said print-based document is assigned a UPN which is symbolically linked to a URL in at least one Web-based document published on the Internet.

272. The Internet-based information system of claim 263, wherein each said publisher-operated client subsystem has a operating system (OS) based UPN/URL data linking functionality having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said OS-based based UPN/URL data linking functionality simultaneously enabling the composition and edition a Web-based document and corresponding a print-media based document.

273. The Internet-based information system of claim 271, wherein said OS-based based UPN/URL data linking functionality enables the simultaneous operation of at least first and second content creating/browsing application on a common computing platform having a GUI, wherein said OS-based based UPN/URL data linking functionality having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said first content creating/browsing application enables the creation and browsing of a Web-based document during said composition/editing mode of operation, whereas said second content creating/browsing application enables the creation and browsing of a print-media based document during said composition/editing mode of operation.

5. 274. The Internet-based information system of claim 271, wherein during said UPN/URL data linking mode of operation, symbolic links can be established between particular content sections within said Web-based document and particular content sections within said print-media based document.

275. The Internet-based information system of claim 271, wherein during said UPN/URL data linking mode of operation, said symbolic links can be drawn graphically while alpha-numeric representations on said symbolic links are created and stored in a UPN/URL data link table.

10 276. The Internet-based information system of claim 271, wherein said OS-based UPN/URL data linking functionality supports electronic data interchange functionalities for transporting said UPN/URL data link table to a UPN/URL database management subsystem.

15 277. The Internet-based information system of claim 275, wherein during said UPN/URL data linking mode of operation, each content section in said Web-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section in said corresponding Web-page located at a specified URL.

20 278. The Internet-based information system of claim 275, wherein said Web-based document also includes one or more advertising sections and said corresponding print-based document also includes one or more advertising sections, and wherein at least one of said content sections in said print-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section on said corresponding Web-based document.

25 279. The Internet-based information system of claim 277, wherein at least one of said advertising sections in said print-based document is assigned a UPN which is symbolically linked to a URL in at least one Web-based document published on the Internet.

30 280. A retail-based system for installation in retail store comprising:
a subsystem of shelves for supporting one or more UPN-encoded products; and
a plurality of Web-enabled bar code symbol driven kiosks mounted relative to said subsystem of shelves, for reading UPN-encoded symbols on said UPN-encoded products and automatically linking to a plurality of URLs pointing to one or more Web-based documents on the WWW linked to the read UPN by the manufacturer of the product and/or agents thereof
35 using a manufacturer-operated client computer subsystem connected to the infrastructure of the Internet and having electronic data interchange capabilities.

40 281. An Internet-enabled bar code driven consumer product information kiosk for deployment within a retail shopping environment, comprising:

a computing platform having embodying e-mail messaging capabilities which enable consumers to automatically save and link CPI-related Web documents as individual attachments

to a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

282
283. Internet-enabled bar code driven consumer product information kiosk of claim 39, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

283
284. Internet-enabled bar code driven consumer product information kiosks for deployment within a retail shopping environment, comprising:

a computing platform having embodying e-mail messaging capabilities which enable embodies e-mail messaging capabilities which enable consumers to automatically save and record the URLs of CPI-related Web documents within the message field of a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

284
285. The Internet-enabled bar code driven consumer product information kiosk of claim 43, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

285
286. An IP-based network installed in a publishing organization and Internet-based system comprising:

a plurality of publisher-operated client computer subsystems connected to said IP-based network, for enabling different departments within said publishing organization to manage different types of UPN/URL links based on the type of information contained within the URL-specified information resource on the WWW and within the UPN-specified section of an article of print media.

286
287. The Internet-based system of claim 286, wherein each said publisher-operated computer-based publishing system enables the electronic layout of: (i) a Web-based publication having different content and advertising sections associated with each Web-page thereof and each such Web-page being located on the WWW at a particular URL; and (ii) a print-media based publication having different content sections and advertising sections associated with each printed-page thereof; wherebetween each such content section and advertising section is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content or advertising section on the corresponding Web-page.

287
288. The Internet-based system of claim 286, wherein each said publisher-operated computer-based publishing system enables the electronic layout of: (i) a Web-based publication having different content and advertising sections associated with each Web-page thereof and each such Web-page being located on the WWW at a particular URL; and (ii) a print-media based publication having different content sections and advertising sections associated with each printed-page thereof; wherebetween each such content section and advertising section is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content or advertising section on the corresponding Web-page.

288
289. The Internet-based system of claim 288, wherein each said computer-based publishing subsystem is capable of automatically generating UPN/URL data link tables listing the URLs of each Web page symbolically linked to UPN assigned to a corresponding printed media page, and that such UPN/URL data link tables are transportable to a UPN/URL database management subsystem using electronic data interchange techniques, thereby enabling consumers (e.g. readers) to link from print-media to corresponding Web-based media using the UPNs printed on documents.

289
290. An Internet-based consumer product information system for use in a retail shopping environment, comprising:

an e-mail server; and

a plurality of Web-enabled bar code driven consumer product information kiosks deployed within a retail shopping environment; and each said Web-enabled bar code driven consumer product information kiosk embodying e-mail messaging capabilities which enable consumers to automatically save and link CRI-related Web documents as individual attachments to a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

290
291. The Internet-based consumer product information system of claim 290, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

291
292. The Internet-based consumer product information system of claim 290 which further comprises:

a central e-mail server for collecting copies of e-mail documents or transmitted from the Web/e-mail enabled kiosks within said retail shopping environment.

292
293. The Internet-based consumer product information system of claim 292 which further comprises a relational data base management subsystem (RDBMS) for use in analyzing compiling and storing data contained within said central e-mail server, and for making such

information accessible to retailers and manufacturers alike for use in product marketing, sales forecasting, customer intelligence, and like operations.

294. An Internet-based consumer product information system for use in a retail shopping environment, comprising:

an e-mail server; and

a plurality of Web-enabled bar code driven consumer product information kiosks deployed within a retail shopping environment, and each said Web-enabled bar code driven consumer product information kiosk embodies e-mail messaging capabilities which enable consumers to automatically save and record the URLs of CPI-related Web documents within the message field of a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

295. The Internet-based consumer product information system of claim 294, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

296. The Internet-based consumer product information system of claim 294 which further comprises:

a central e-mail server for collecting copies of e-mail documents (and records thereof) transmitted from the Web/e-mail enabled kiosks within said retail shopping environment.

297. The Internet-based consumer product information system of claim 296, which further comprises a relation data base management subsystem for use in analyzing compiling and storing data contained within said central e-mail server, and for making such information accessible to retailers and manufacturers alike for use in product marketing, sales forecasting, customer intelligence, and like operations which enable more effective marketing of consumer products and services in both physical and electronic forms of commerce.

298. An Internet-based information system, comprising:

an IP-based network installed in a retail shopping environment and connected to the infrastructure of the Internet by way of an IP-based router; and

a plurality of publisher-operated client subsystems connected to said IP-based network, for the purpose of enabling different departments within the publishing organization (e.g. advertising, world news, business, technology, sports, finance, education, arts and leisure, etc.) to manage different types of UPN/URL links based on the type of information contained within the URL-specified information resource on the WWW.

²⁹⁸
299. The Internet-based information system of claim 297, wherein each said publisher-operated client subsystem has a publishing software program having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said computer-based publishing software program simultaneously enables the composition and edition a Web-based document and corresponding a print-media based document.

²⁹⁹
300. The Internet-based information system of claim 298, wherein said publishing software program has a split-screen GUI having left-side and right-side display frames, wherein the layout of said Web-based document is displayed in said left-side display frame of said split-screen GUI, and said print-media based document is displayed on said right-side display frame of said split-screen GUI.

³⁰⁰
301. The Internet-based information system of claim 298, wherein said publishing software program generates, during said UPN/URL data linking mode, a UPN/URL data link table indicating the symbolic links established between particular content sections within said Web-based document and particular content sections within said print-media based document.

³⁰¹
302. The Internet-based information system of claim 298, wherein said publishing software program supports electronic data interchange functionalities for transporting said UPN/URL data link table to a UPN/URL database management subsystem.

³⁰²
303. The Internet-based information system of claim 299, wherein said left-side display frame has a first set of independent scroll bars, and said right-side display frame has a second set of independent scroll bars, thereby facilitating alignment of corresponding sections during said composition/editorial mode of operation and said UPN/URL data linking mode of operation.

³⁰³
304. The Internet-based information system of claim 299, wherein during said UPN/URL data linking mode of operation, each content section in said Web-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section in said corresponding Web-page located at a specified URL.

³⁰⁴
305. The Internet-based information system of claim 299, wherein said Web-based document also includes one or more advertising sections and said corresponding print-based document also includes one or more advertising sections, and wherein at least one of said content sections in said print-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section on said corresponding Web-based document.

³⁰⁵
306. The Internet-based information system of claim 299, wherein at least one of said advertising sections in said print-based document is assigned a UPN which is symbolically linked to a URL in at least one Web-based document published on the Internet.

306
307. The Internet-based information system of claim 297 which further comprises a network information server on said IP-network for maintaining a secure firewall.

308
308. An Internet-based client subsystem for operation by a publisher of print-media based documents and Web-based documents, comprising:

a computing platform; and

a publishing software program for executing on said computing platform, and having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said publishing software program simultaneously enables the composition and edition a Web-based document and corresponding a print-media based document.

309
309. The Internet-based client subsystem of claim 307, wherein said publishing software program has a split-screen GUI having left-side and right-side display frames, wherein the layout of said Web-based document is displayed in said left-side display frame of said split-screen GUI, and said print-media based document is displayed on said right-side display frame of said split-screen GUI.

310
310. The Internet-based client subsystem of claim 308, wherein said publishing software program generates, during said UPN/URL data linking mode, a UPN/URL data link table indicating the symbolic links established between particular content sections within said Web-based document and particular content sections within said print-media based document.

311
311. The Internet-based client subsystem of claim 309, wherein said publishing software program supports electronic data interchange functionalities for transporting said UPN/URL data link table to a UPN/URL database management subsystem.

312
312. The Internet-based client subsystem of claim 308, wherein said left-side display frame has a first set of independent scroll bars, and said right-side display frame has a second set of independent scroll bars, thereby facilitating alignment of corresponding sections during said composition/editorial mode of operation and said UPN/URL data linking mode of operation.

313
313. The Internet-based client subsystem of claim 308, wherein during said UPN/URL data linking mode of operation, each content section in said Web-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section in said corresponding Web-page located at a specified URL.

314
314. The Internet-based client subsystem of claim 308, wherein said Web-based document also includes one or more advertising sections and said corresponding print-based document also includes one or more advertising sections, and wherein at least one of said content sections in said print-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section on said corresponding Web-based document.

314

315. The Internet-based client subsystem of claim 313, wherein at least one of said advertising sections in said print-based document is assigned a UPN which is symbolically linked to a URL in at least one Web-based document published on the Internet.

315

316. The Internet-based information system of claim 307, wherein each said publisher-operated client subsystem has a operating system (OS) based UPN/URL data linking functionality having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said OS-based based UPN/URL data linking functionality simultaneously enabling the composition and edition a Web-based document and corresponding a print-media based document.

316

317. The Internet-based information system of claim 315, wherein said OS-based based UPN/URL data linking functionality enables the simultaneous operation of at least first and second content creating/browsing application on a common computing platform having a GUI, wherein said OS-based based UPN/URL data linking functionality having a composition/editing mode of operation and a UPN/URL data linking mode of operation, wherein said first content creating/browsing application enables the creation and browsing of a Web-based document during said composition/editing mode of operation, whereas said second content creating/browsing application enables the creation and browsing of a print-media based document during said composition/editing mode of operation.

317

318. The Internet-based information system of claim 315, wherein during said UPN/URL data linking mode of operation, symbolic links can be established between particular content sections within said Web-based document and particular content sections within said print-media based document.

318

319. The Internet-based information system of claim 315, wherein during said UPN/URL data linking mode of operation, said symbolic links can be drawn graphically while alpha-numeric representations on said symbolic links are created and stored in a UPN/URL data link table.

319

320. The Internet-based information system of claim 315, wherein said OS-based UPN/URL data linking functionality supports electronic data interchange functionalities for transporting said UPN/URL data link table to a UPN/URL database management subsystem.

320

321. The Internet-based information system of claim 319, wherein during said UPN/URL data linking mode of operation, each content section in said Web-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section in said corresponding Web-page located at a specified URL.

321

322. The Internet-based information system of claim 319, wherein said Web-based document also includes one or more advertising sections and said corresponding print-based document also includes one or more advertising sections, and wherein at least one of said content sections in

said print-based document is assigned a Universal Product Number (UPN) which is symbolically linked to a particular content section on said corresponding Web-based document.

322

323. The Internet-based information system of claim 321, wherein at least one of said advertising sections in said print-based document is assigned a UPN which is symbolically linked to a URL in at least one Web-based document published on the Internet.

323

324. A retail-based system for installation in retail store comprising:
a subsystem of shelves for supporting one or more UPN-encoded products; and
a plurality of Web-enabled bar code symbol driven kiosks mounted relative to said subsystem of shelves, for reading UPN-encoded symbols on said UPN-encoded products and automatically linking to a plurality of URLs pointing to one or more Web-based documents on the WWW linked to the read UPN by the manufacturer of the product and/or agents thereof using a manufacturer-operated client computer subsystem connected to the infrastructure of the Internet and having electronic data interchange capabilities.

321

325. An Internet-enabled bar code driven consumer product information kiosk for deployment within a retail shopping environment, comprising:

a computing platform having embodying e-mail messaging capabilities which enable consumers to automatically save and link CPI-related Web documents as individual attachments to a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

325

326. Internet-enabled bar code driven consumer product information kiosk of claim 324, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

324

327. Internet-enabled bar code driven consumer product information kiosks for deployment within a retail shopping environment, comprising:

a computing platform having embodying e-mail messaging capabilities which enable embodies e-mail messaging capabilities which enable consumers to automatically save and record the URLs of CPI-related Web documents within the message field of a preformatted e-mail envelope that is transmitted from said e-mail server, to a remote e-mail address specified by the consumer within said retail shopping environment.

321

328. The Internet-enabled bar code driven consumer product information kiosk of claim 327, wherein said preformatted e-mail envelope is addressed with the consumer/shopper's home, office or like e-mail address by either reading an e-mail address encoded within a bar code (or magnetic-stripe) structure or manually entering the same within the addressee field, and said e-

mail envelope is transported to its destination by manual selection of a send button within the displayed e-mail envelope.

428
5 329. A consumer product information catalog subsystem (RDBMS) for storing and managing media-rich consumer product information content relating to each and every UPN-indexed product that the manufacturer makes, sells and/or distributes to retailers along the retail supply and demand chain.

429
10 330. A consumer product information catalog subsystem (RDBMS) realizable as a standalone database application supported on one or more client machines operably connected to the LAN or WAN of the manufacturer's enterprise, and or as a network database information server connected to the LAN or WAN and being accessible to various consumer product information managers working within the manufacturer's enterprise, and using Web-enabled client machines to carry out consumer product information content management operations across the enterprise, most likely under the supervision of one or more consumer product brand-managers, responsible for branding of such consumer products.

430
20 331. A consumer product information catalog subsystem (RDBMS) for use within an Internet-based consumer product information management, distribution and serving system, wherein one or more computer programs (e.g. scripts) are provided in the RDBMS for the purpose of (i) analyzing the information fields of the RDBMS, (ii) automatically generate a set of UPN/URL/Trademark/Product-Descriptor data links for each UPN-indexed product with the RDBMS, (iii) locally store each such set of UPN/URL/Trademark/Product-Descriptor data links within the RDBMS, and (iv) ultimately electronically data transport each such set of data links to a UPN/URL Database Management Subsystem employed within a consumer product information management, distribution and serving system realized over the Internet.

431
30 332. A consumer product information management subsystem that can easily used within the manufacturer's enterprise in a way which provides the brand manager with the choice of either storing the URLs of consumer product related information, and also the actual information file content thereof if such multi-media information content is within the control of the manufacturer's operations, or copyable into the RDBMS under its supervision control.

432
35 333. Method of managing consumer product information comprising the steps of:
(a) analyzing the information fields of a consumer product information catalog subsystem (RDBMS);
(b) automatically generate a set of UPN/URL/Trademark/Product-Descriptor data links for each UPN-indexed product with the RDBMS; and
40 (c) locally store each such set of UPN/URL/Trademark/Product-Descriptor data links within the RDBMS.

333

334. The method of claim 333, which further comprises:

(d) electronically data transport each such set of data links to a UPN/URL Database Management Subsystem employed within a consumer product information management, distribution and serving system realized over the Internet.

5

334

335. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a manufacturer's EDI-enabled UPN/URL RDBMS and/or a consumer product information catalog database management subsystem are configured between (i) a plurality of Web-enabled client machines operated within the manufacturer's enterprise by various departments, and (ii) a conventional manufacturer's EDI-enabled UPC-indexed Product Sales Catalog running on a (possibly remotely-situated) computing platform deployed within a manufacturer's enterprise.

10

007460158

20

335

336. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a manufacturer's EDI-enabled UPN/URL RDBMS and/or a consumer product information catalog database management subsystem configured between (i) a plurality of Web-enabled client machines operated within the manufacturer's enterprise by various departments, and (ii) a conventional manufacturer's EDI-enabled UPC-indexed Product Sales Catalog running on a (possibly remotely-situated) computing platform deployed within a manufacturer's enterprise.

336

337. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a manufacturer's EDI-enabled UPN/URL RDBMS is initialized by importing UPC numbers, trademarks and product-descriptors from the manufacturer's locally-maintained UPC-indexed product catalog deployed within the manufacturer's enterprise.

25

337

338. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a manufacturer's EDI-enabled UPN/URL RDBMS is initialized by importing UPC numbers, trademarks and product-descriptors from the manufacturer's locally-maintained UPC-indexed product catalog deployed within the manufacturer's enterprise.

30

338

339. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein the conventional UPC-indexed product price catalog functions as the master UPC catalog source within the manufacturer's enterprise, while the manufacturer's EDI-enabled UPN/URL Database Management Subsystem functions as a slave UPC catalog source within the enterprise, data-synchronized to the master UPC catalog source.

35

339

340. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a UPC-indexed product price catalog functions as the master UPC catalog source within the manufacturer's enterprise, while the manufacturer's EDI-enabled

40

UPN/URL Database Management Subsystem functions as a slave UPC catalog source within the enterprise, data-synchronized to the master UPC catalog source.

340
341. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a manufacturer's EDI-enabled UPN/URL Database Management Subsystem is programmed to automatically (i) access the conventional UPC-indexed product sales catalog on periodic (e.g. daily) basis and (ii) import up-to-date (i.e. current) UPC numbers, trademarks and product-descriptors that are being used by the manufacturer within its UPC product sales catalog for enabling B-2-B e-commerce transactions with its retail trading partners.

341
342. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein a manufacturer's EDI-enabled UPN/URL Database Management Subsystem is programmed to automatically (i) access the conventional UPC-indexed product sales catalog on periodic (e.g. daily) basis and (ii) import up-to-date (i.e. current) UPC numbers, trademarks and product-descriptors that are being used by the manufacturer within its UPC product sales catalog for enabling B-2-B e-commerce transactions with its retail trading partners.

342
343. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein data-synchronization operations are carried out in a fully automatic, programmed manner over the Internet or particular VAN, regardless of where the manufacturer's EDI-enabled UPN/URL Database Management Subsystem and UPC-indexed product price catalog resides on the network.

343
344. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein data-synchronization operations are carried out in a fully automatic, programmed manner over the Internet or particular VAN, regardless of where the manufacturer's EDI-enabled UPN/URL Database Management Subsystem and UPC-indexed product price catalog resides on the network.

344
345. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein by importing UPC numbers, trademarks and product-descriptors, through database-initialization and data-synchronization techniques, the manufacturer's brand managers, product managers, advertising agents and support personnel can manage UPN/URL/trademark/product-descriptor data links within the manufacturer's EDI-enabled UPN/URL Database Management Subsystem and transport the same to the central UPN/URL Database Management Subsystem, in cooperation with pre-existing EDI-based B-2-B e-commerce support operations.

345
346. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein by importing UPC numbers, trademarks and product-

descriptors, through database-initialization and data-synchronization techniques, the manufacturer's brandmanagers, product managers, advertising agents and support personnel manage UPN/URL/trademark/product-descriptor data links within the manufacturer's EDI-enabled UPN/URL Database Management Subsystem and transport the same to the central UPN/URL Database Management Subsystem, in cooperation with pre-existing EDI-based B-2-B e-commerce support operations.

347. A method of managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein brandmanagers, product managers, advertising agents and support personnel can manage UPN/trademark-indexed CPI data files within the manufacturer's consumer product information catalog database management subsystem and transport the same to a central UPN-indexed Data warehouse.

348. An apparatus for managing UPN/URL/Trademark/Product-Descriptor data links within a manufacturer's enterprise, wherein brandmanagers, product managers, advertising agents and support personnel can manage UPN/trademark-indexed CPI data files within the manufacturer's consumer product information catalog database management subsystem and transport the same to a central UPN-indexed Data warehouse.

349. A method of and database-initialization and synchronization within a manufacturer's enterprise, wherein a business-to-consumer (B-2-C) consumer product information management and distribution system is used in cooperation with conventional EDI-enabled B-2-B e-commerce transaction networks supported by conventional UPC product sales catalogs enabling brand managers, product managers, advertising agents and support personnel to practice UPC/URL/Trademark/product-descriptor management techniques without disrupting conventional UPC management operations performed by others within the manufacturer's enterprise in connection with enabling EDI-based B-2-B e-commerce transactions.

350. An apparatus for database-initialization and synchronization within a manufacturer's enterprise, wherein the business-to-consumer (B-2-C) consumer product information management and distribution system is used in cooperation with conventional EDI-enabled B-2-B e-commerce transaction networks supported by conventional UPC product sales catalogs enabling brand managers, product managers, advertising agents and support personnel to practice UPC/URL/Trademark/product-descriptor management techniques without disrupting conventional UPC management operations performed by others within the manufacturer's enterprise in connection with enabling EDI-based B-2-B e-commerce transactions.

351. An Internet-based consumer product marketing, merchandising and education/information system which enables manufacturers, their agents, retailers and their agents, and consumers to carryout product-related functions along the demand side of the retail chain, comprising:

a central RDBMS (i.e. data warehouse) for storing a central database of consumer product related information resource files (IRFs) each said IRF being indexed with a Universal

Product Number (UPN) assigned thereto by the manufacturer of the consumer product, or its designated agent, which relates to said consumer product;

a first subsystem for enabling a manufacturer's marketing, brand and/or product managers to create and manage a local RDBMS containing UPN-indexed IRFs related to the consumer products of the manufacturer being offered for sale in both physical and/or electronic marketplaces, and periodically transport said local RDBMS of UPN-indexed IRFs to said central RDBMS by electronic data transport techniques, said local RDBMS of UPN-indexed IRFs being selected by the manufacturer's marketing, brand and/or product managers so as to create a desired brand image for each said consumer product of the manufacturer;

a second subsystem for enabling consumers to access one or more UPN-indexed IRFs in said central RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the demand side of the retail chain; and

one or more subsystems selected from the group consisting of:

a third subsystem for enabling manufacturers and their advertising and marketing agents to access one or more UPN-indexed IRFs in said central RDBMS, to display consumer product advertisements to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to project the desired brand image to consumers; and

a fourth subsystem for enabling retailers and their marketing and promotional agents to access one or more UPN-indexed IRFs in said central RDBMS, to promote consumer products to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to promote the sale of such products in inventory;

wherein said central RDBMS, said local RDBMS, and said first, second, third and fourth subsystems are each operably connected to the infrastructure of the Internet.

351
352. The Internet-based consumer product marketing, merchandising and education/information system of claim 351, wherein said second subsystem further enables retailer purchasing agents to access one or more UPN-indexed IRFs in said central RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the supply side of the retail chain.

352
353. The Internet-based consumer product marketing, merchandising and education/information system of claim 351, wherein said second subsystem comprises one or more information access and display devices selected from the group consisting of:

a network of barcode-driven/touch-screen-enabled physical CPI kiosks are physically installed within physical retail environments using wireless Internet-connectivity enabling technology, and made accessible to retail shoppers in physical retail environments; and

a network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW (e.g. in EC-based retail stores and catalogs, on-line auction sites, Internet product advertisements), and made accessible to retail shoppers across the Internet.

354

354. The Internet-based consumer product marketing, merchandising and education/information system of claim 353, wherein said second subsystem further comprises a plurality of Web (http) information servers for driving said network of barcode-driven/touch-screen-enabled physical CPI kiosks.

355

355. The Internet-based consumer product marketing, merchandising and education/information system of claim 353, wherein said second subsystem further comprises a plurality of CPIR-enabling Applet servers for driving said network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW, including retailer-oriented WWW sites served to physical CPI kiosks in a retailer's store.

356

356. The Internet-based consumer product marketing, merchandising and education/information system of claim 353, wherein said central RDBMS further includes a data processing/filtering subsystem for processing data contained within said central RDBMS so that each physical CPI kiosk connected to an enabling Web server (and deployed within a particular retailer's store) is capable of displaying only UPN-indexed IRFs created by manufacturer's (or their agents) who (i) sell products in the retailer's physical store and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's store shelves about which said physical CPI kiosk is physically installed.

357

357. The Internet-based consumer product marketing, merchandising and education/information system of claim 355, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating, for each UPN-indexed IRF record in said central RDBMS, a CPIR-enabling Applet/Servlet, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by retailers, advertisers, auctioneers, et al, and subsequent embedment into the HTML-fabric of WWW.

358

358. The Internet-based consumer product marketing, merchandising and education/information system of claim 355, wherein said second subsystem comprises a data processing/filtering subsystem (e.g. modules of data processing scripts), integrated with said central RDBMS, for processing data within said central RDBMS so that each virtual CPI kiosk deployed within a particular retailer's electronic store and enabled by at least one said CPIR-enabling Applet server is capable of displaying only UPN-indexed IRFs created by manufacturer's who (i) sell products in the retailer's electronic store (i.e. e-store) and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's virtual shelves (e.g. Web pages) about which the virtual kiosk is installed within the HTML-fabric of the retailer's e-store.

359

359. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem comprises:

one or more information servers for delivering a suite of information services to manufacturers (i.e. vendors) including, the downloading of and providing technical support for software-based EDI-enabled UPN-indexed IRF management and transport tools that are made available to registered manufacturers, and their agents, as well as to anyone else operating along the retail chain as a vendor of consumer products (which may also include retailers as well); and

wherein said software-based EDI-enabled UPN-indexed IRF management and transport tools enable the manufacturer's marketing, brand and/or product managers (and their support personnel) to efficiently carry out UPN-indexed IRF management and transport operations which are required to build and maintain said local RDBMS.

359
360. The Internet-based consumer product marketing, merchandising and education/information system of claim 351, wherein said second subsystem comprises a data processing/filtering subsystem for data processing (i.e. filtering) said UPN-indexed IRF's and data contained in said central RDBMS, in various ways prior to distribution to consumers, so as to preserve the trust, confidence and goodwill developed between manufacturers and retailers in both physical and electronic streams of commerce.

400
361. The Internet-based consumer product marketing, merchandising and education/information system of claim 360, wherein said data processing/filtering subsystem involves using information about (i) the manufacturers represented (or promoted) by a particular retailer in a particular retail environment, as well as (ii) the rights and/or privileges accorded to product manufacturers and/or distributors (i.e. vendors) by retailers with regard to displaying a manufacturer's product in a particular aisle of the retailer's store and optionally at a particular shelf location, as well as on a particular Web page(s) of a retailer's electronic store or catalog (e.g. virtual aisles) and optionally at a particular location (i.e. virtual shelf location) therealong.

361
362. The Internet-based consumer product marketing, merchandising and education/information system of claim 9, wherein said software-based EDI-enabled UPN-indexed IRF tools enable a manufacturer's marketing, brand and/or managers to create and manage a set of UPN-indexed IRFs for each consumer product within their product portfolio, store said set of UPN-indexed IRFs within said local RDBMS, and electronically transport said set of UPN-indexed IRFs from said local RDBMS to said central RDBMS, for distribution and display to consumers in the form of a interactive GUI having URL links to said set of UPN-indexed IRFs.

362
363. The Internet-based consumer product marketing, merchandising and education/information system of claim 353, wherein said third subsystem enables an advertisers (including a retailer, a manufacturer or its agent) to buy advertising slots available on particular retailer-deployed barcode-driven physical CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short UPN-indexed product advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting consumer product related information from said system.

363
364. The Internet-based consumer product marketing, merchandising and education/information system of claim 363, wherein said third subsystem enables advertisers to perform one or more functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on manufacturer/retailer authorized kiosks; (iv) purchase advertisement slots on manufacturer/retailer authorized physical or virtual) CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

364
365. The Internet-based consumer product marketing, merchandising and education/information system of claim 353, wherein said fourth subsystem enables a promoter (including a retailer, a manufacturer or its agent) to create customized product promotion campaigns, containing short UPC-indexed product advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven/touch-screen enabled physical CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-sale (POS) stations within the same retail stores in which the participating physical CPI kiosks are deployed.

365
366. The Internet-based consumer product marketing, merchandising and education/information system of claim 353, wherein said fourth subsystem enables promoters to perform one or more functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider purchasing or otherwise acquiring promotion slots on manufacturer/retailer authorized kiosks; (iv) purchase or otherwise acquire (product sales) promotion slots on manufacturer/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage product promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or manufacturers) in retail space; and (vi) monitor the performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

366
367. An Internet-based consumer service marketing, merchandising and education/information system which enables service-providers, their agents, retailers and their agents, and consumers to carryout service-related functions along the demand side of the retail chain, comprising:

a central RDBMS (i.e. data warehouse) for storing a central database of consumer service related information resource files (IRFs) each said IRF being indexed with a Universal Service Number (USN) assigned thereto by the service-provider of the consumer service, or its designated agent, which relates to said consumer service;

5 a first subsystem for enabling a service-provider's marketing, brand and/or service managers to create and manage a local RDBMS containing USN-indexed IRFs related to the consumer services of the service-provider being offered for sale in both physical and/or electronic marketplaces, and periodically transport said local RDBMS of USN-indexed IRFs to said central RDBMS by electronic data transport techniques, said local RDBMS of USN-indexed IRFs being selected by the service-provider's marketing, brand and/or service managers so as to create a desired brand image for each said consumer service of the service-provider;

10 a second subsystem for enabling consumers to access one or more USN-indexed IRFs in said central RDBMS, to request and obtain information about a service-provider's consumer service so as to make informed/educated purchases along the demand side of the retail chain; and one or more subsystems selected from the group consisting of:

20 a third subsystem for enabling service-providers and their advertising and marketing agents to access one or more USN-indexed IRFs in said central RDBMS, to display consumer service advertisements to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to project the desired brand image to consumers; and

a fourth subsystem for enabling retailers and their marketing and promotional agents to access one or more USN-indexed IRFs in said central RDBMS, to promote consumer services to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to promote the sale of such services in inventory;

25 wherein said central RDBMS, said local RDBMS, and said first, second, third and fourth subsystems are each operably connected to the infrastructure of the Internet.

30 ~~367~~ The Internet-based consumer service marketing, merchandising and education/information system of claim 1, wherein said second subsystem further enables retailer purchasing agents to access one or more USN-indexed IRFs in said central RDBMS, to request and obtain information about a service-provider's consumer service so as to make informed/educated purchases along the supply side of the retail chain.

35 ~~368~~ The Internet-based consumer service marketing, merchandising and education/information system of claim 367, wherein said second subsystem comprises one or more information access and display devices selected from the group consisting of:

a network of barcode-driven/touch-screen-enabled physical CPI kiosks are physically installed within physical retail environments using wireless Internet-connectivity enabling technology, and made accessible to retail shoppers in physical retail environments; and

40 a network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW (e.g. in EC-based retail stores and catalogs, on-

line auction sites, Internet service advertisements), and made accessible to retail shoppers across the Internet.

369
370. The Internet-based consumer service marketing, merchandising and education/information system of claim 369, wherein said second subsystem further comprises a plurality of Web (http) information servers for driving said network of barcode-driven/touch-screen-enabled physical CPI kiosks.

371. The Internet-based consumer service marketing, merchandising and education/information system of claim 369, wherein said second subsystem further comprises a plurality of CPIR-enabling Applet servers for driving said network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW, including retailer-oriented WWW sites served to physical CPI kiosks in a retailer's store.

372. The Internet-based consumer service marketing, merchandising and education/information system of claim 369, wherein said central RDBMS further includes a data processing/filtering subsystem for processing data contained within said central RDBMS so that each physical CPI kiosk connected to an enabling Web server (and deployed within a particular retailer's store) is capable of displaying only USN-indexed IRFs created by service-provider's (or their agents) who (i) sell services in the retailer's physical store and (ii) have acquired rights and/or privileges (by the retailer) to display services on the retailer's store shelves about which said physical CPI kiosk is physically installed.

373. The Internet-based consumer service marketing, merchandising and education/information system of claim 371, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating, for each USN-indexed IRF record in said central RDBMS, a CPIR-enabling Applet/Servlet, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by retailers, advertisers, auctioneers, et al, and subsequent embedment into the HTML-fabric of WWW.

374. The Internet-based consumer service marketing, merchandising and education/information system of claim 371, wherein said second subsystem comprises a data processing/filtering subsystem (e.g. modules of data processing scripts), integrated with said central RDBMS, for processing data within said central RDBMS so that each virtual CPI kiosk deployed within a particular retailer's electronic store and enabled by at least one said CPIR-enabling Applet server is capable of displaying only USN-indexed IRFs created by service-provider's who (i) sell services in the retailer's electronic store (i.e. e-store) and (ii) have acquired rights and/or privileges (by the retailer) to display services on the retailer's virtual shelves (e.g. Web pages) about which the virtual kiosk is installed within the HTML-fabric of the retailer's e-store.

374
375. The Internet-based consumer service marketing, merchandising and education/information system of claim 367, wherein said first subsystem comprises:

one or more information servers for delivering a suite of information services to service-providers (i.e. vendors) including, the downloading of and providing technical support for software-based EDI-enabled USN-indexed IRF management and transport tools that are made available to registered service-providers, and their agents, as well as to anyone else operating along the retain chain as a vendor of consumer services (which may also include retailers as well); and

wherein said software-based EDI-enabled USN-indexed IRF management and transport tools enable the service-provider's marketing, brand and/or service managers (and their support personnel) to efficiently carry out USN-indexed IRF management and transport operations which are required to build and maintain said local RDBMS.

375
376. The Internet-based consumer service marketing, merchandising and education/information system of claim 367, wherein said second subsystem comprises a data processing/filtering subsystem for data processing (i.e. filtering) said USN-indexed IRF's and data contained in said central RDBMS, in various ways prior to distribution to consumers, so as to preserve the trust, confidence and goodwill developed between service-providers and retailers in both physical and electronic streams of commerce.

376
377. The Internet-based consumer service marketing, merchandising and education/information system of claim 376, wherein said data processing/filtering subsystem involves using information about (i) the service-providers represented (or promoted) by a particular retailer in a particular retail environment, as well as (ii) the rights and/or privileges accorded to service service-providers and/or distributors (i.e. vendors) by retailers with regard to displaying a service-provider's service in a particular aisle of the retailer's store and optionally at a particular shelf location, as well as on a particular Web-page(s) of a retailer's electronic store or catalog (e.g. virtual aisles) and optionally at a particular location (i.e. virtual shelf location) therealong.

377
378. The Internet-based consumer service marketing, merchandising and education/information system of claim 375, wherein said software-based EDI-enabled USN-indexed IRF tools enable a service-provider's marketing, brand and/or managers to create and manage a set of USN-indexed IRFs for each consumer service within their service portfolio, store said set of USN-indexed IRFs within said local RDBMS, and electronically transport said set of USN-indexed IRFs from said local RDBMS to said central RDBMS, for distribution and display to consumers in the form of a interactive GUI having URL links to said set of USN-indexed IRFs.

378
379. The Internet-based consumer service marketing, merchandising and education/information system of claim 369, wherein said third subsystem enables an advertisers

(including a retailer, a service-provider or its agent) to buy advertising slots available on particular retailer-deployed barcode-driven physical CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short USN-indexed service advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting consumer service related information from said system.

379
380. The Internet-based consumer service marketing, merchandising and education/information system of claim 379, wherein said third subsystem enables advertisers to perform one or more functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on service-provider/retailer authorized kiosks; (iv) purchase advertisement slots on service-provider/retailer authorized physical or virtual CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

380
381. The Internet-based consumer service marketing, merchandising and education/information system of claim 369, wherein said fourth subsystem enables a promoter (including a retailer, a service-provider or its agent) to create customized service promotion campaigns, containing short UPC-indexed service advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven/touch-screen enabled physical CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-sale (POS) stations within the same retail stores in which the participating physical CPI kiosks are deployed.

381
382. The Internet-based consumer service marketing, merchandising and education/information system of claim 369, wherein said fourth subsystem enables promoters to perform one or more functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider purchasing or otherwise acquiring promotion slots on service-provider/retailer authorized kiosks; (iv) purchase or otherwise acquire (service sales) promotion slots on service-provider/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage service promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or service-providers) in retail space; and (vi) monitor the

performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

383. An Internet-based consumer service marketing, merchandising and education/information system which enables service-providers, their agents, retailers and their agents, and consumers to carryout service-related functions along the demand side of the retail chain, comprising:

a central USN/SM/SN/URL RDBMS for storing a central database of USN/SM/SN/URL links, wherein said USN represents a Universal Service Number assigned to a particular service offered by a service-provider, said SM represents a Service Mark used in connection with said particular service, said SD is representative of one or more Universal Resource Locators pointing to information resources on the WWW relating to said particular service;

a first subsystem for enabling a service-provider's marketing, brand and/or service managers to create and manage a local database of USN/SM/SN/URL links related to the consumer services of the service-provider being offered for sale in both physical and/or electronic marketplaces, and periodically transport said local database of USN/SM/SN/URL links to said central USN/SM/SN/URL RDBMS by electronic data transport techniques, said local database of USN/SM/SN/URL links being managed with a local USN/SM/SN/URL RDBMS, and selected by the service-provider's marketing, brand and/or service managers so as to create a desired brand image for each said consumer service of the service-provider;

a second subsystem for enabling consumers to access one or more USN/SM/SN/URL links in said central USN/SM/SN/URL RDBMS, to request and obtain information about a service-provider's consumer service so as to make informed/educated purchases along the demand side of the retail chain; and

one or more subsystems selected from the group consisting of:

a third subsystem for enabling service-providers and their advertising and marketing agents to access one or more USN/SM/SN/URL links in said central USN/SM/SN/URL RDBMS, to display consumer service advertisements to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to project the desired brand image to consumers; and

a fourth subsystem for enabling retailers and their marketing and promotional agents to access one or more USN/SM/SN/URL links in said central USN/SM/SN/URL RDBMS, to promote consumer services to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to promote the sale of such services;

wherein said central USN/SM/SN/URL RDBMS, said local USN/SM/SN/URL RDBMS, and said first, second, third and fourth subsystems are each operably connected to the infrastructure of the Internet.

384. The Internet-based consumer service marketing, merchandising and education/information system of claim 383, wherein said second subsystem further enables retailer purchasing agents to access one or more USN/SM/SN/URL links in said central USN/SM/SN/URL RDBMS, to

request and obtain information about a service-provider's consumer service so as to make informed/educated purchases along the supply side of the retail chain.

384
385. The Internet-based consumer service marketing, merchandising and education/information system of claim 383, wherein said second subsystem comprises one or more information access and display devices selected from the group consisting of:

a network of barcode-driven/touch-screen-enabled physical CPI kiosks are physically installed within physical retail environments using wireless Internet-connectivity enabling technology, and made accessible to retail shoppers in physical retail environments; and

a network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW (e.g. in EC-based retail stores and catalogs, on-line auction sites, Internet service advertisements), and made accessible to retail shoppers across the Internet.

385
386. The Internet-based consumer service marketing, merchandising and education/information system of claim 385, wherein said second subsystem further comprises a plurality of Web (http) information servers for driving said network of barcode-driven/touch-screen-enabled physical CPI kiosks.

386
387. The Internet-based consumer service marketing, merchandising and education/information system of claim 385, wherein said second subsystem further comprises a plurality of CPIR-enabling Applet servers for driving said network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW, including retailer-oriented WWW sites served to physical CPI kiosks in a retailer's store.

387
388. The Internet-based consumer service marketing, merchandising and education/information system of claim 385, wherein said central USN/SM/SN/URL RDBMS further includes a data processing/filtering subsystem for processing data contained within said central USN/SM/SN/URL RDBMS so that each physical CPI kiosk connected to an enabling Web server (and deployed within a particular retailer's store) is capable of displaying only USN/SM/SN/URL links created by service-provider's who (i) sell services in the retailer's physical store and (ii) have acquired rights and/or privileges (by the retailer) to display services on the retailer's store shelves about which said physical CPI kiosk is physically installed.

388
389. The Internet-based consumer service marketing, merchandising and education/information system of claim 387, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating, for each USN/SM/SN/URL link record in said central USN/SM/SN/URL RDBMS, a CPIR-enabling Applet/Servlet, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by

retailers, advertisers, auctioneers, et al, and subsequent embedment into the HTML-fabric of WWW.

389
390. The Internet-based consumer service marketing, merchandising and education/information system of claim 387, wherein said second subsystem comprises a data processing/filtering subsystem (e.g. modules of data processing scripts), integrated with said central USN/SM/SN/URL RDBMS, for processing data within said central USN/SM/SN/URL RDBMS so that each virtual CPI kiosk deployed within a particular retailer's electronic store and enabled by at least one said CPIR-enabling Applet server is capable of displaying only USN/SM/SN/URL links created by service-provider's who (i) sell services in the retailer's electronic store (i.e. e-store) and (ii) have acquired rights and/or privileges (by the retailer) to display services on the retailer's virtual shelves (e.g. Web pages) about which the virtual kiosk is installed within the HTML-fabric of the retailer's e-store.

390
391. The Internet-based consumer service marketing, merchandising and education/information system of claim 383, wherein said first subsystem comprises:

one or more information servers for delivering a suite of information service-providers to service-providers (i.e. vendors) including, the downloading of and providing technical support for software-based EDI-enabled USN/SM/SN/URL link creation, management and transport (LCMT) tools that are made available to registered service-providers, and their agents, as well as to anyone else operating along the retain chain as a vendor of consumer services (which may also include retailers as well); and

wherein said software-based EDI-enabled USN/SM/SN/URL LCMT tools enable the service-provider's marketing, brand and/or service managers (and their support personnel) to efficiently carry out USN/SM/SN/URL data-linking and transport operations which are required to build and maintain said local database.

391
392. The Internet-based consumer service marketing, merchandising and education/information system of claim 383, wherein said second subsystem comprises a data processing/filtering subsystem for data processing (i.e. filtering) said USN/SM/SN/URL links and data contained in said central USN/SM/SN/URL RDBMS, in various ways prior to distribution to consumers, so as to preserve the trust, confidence and goodwill developed between service-providers and retailers in both physical and electronic streams of commerce.

392
393. The Internet-based consumer service marketing, merchandising and education/information system of claim 392, wherein said data processing/filtering subsystem involves using information about (i) the service-providers represented (or promoted) by a particular retailer in a particular retail environment, as well as (ii) the rights and/or privileges accorded to service service-providers and/or distributors (i.e. vendors) by retailers with regard to displaying a service-provider's service in a particular aisle of the retailer's store and optionally at a particular shelf location, as well as on a particular Web-page(s) of a retailer's electronic store or

catalog (e.g. virtual aisles) and optionally at a particular location (i.e. virtual shelf location) therealong.

393

394. The Internet-based consumer service marketing, merchandising and education/information system of claim 391, wherein said software-based EDI-enabled USN/SM/SN/URL LCMT tools enable a service-provider's marketing, brand and/or managers to create and manage a list of USN/SM/SN/URL links for each consumer service within their service portfolio, store said list of USN/SM/SN/URL links within said local database, realized as a locally managed USN/SM/SN/URL RDBMS, and electronically transporting said list of USN/SM/SN/URL links from said locally managed USN/SM/SN/URL RDBMS to said central USN/SM/SN/URL RDBMS, for distribution and display to consumers in the form of a USN/SM/SN/URL link display GUI.

394

395. The Internet-based consumer service marketing, merchandising and education/information system of claim 386, wherein said third subsystem enables an advertisers (including a retailer, a service-provider or its agent) to buy advertising slots available on particular retailer-deployed barcode-driven physical CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short UPC-indexed service advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting consumer service related information from said system.

395

396. The Internet-based consumer service marketing, merchandising and education/information system of claim 395, wherein said third subsystem enables advertisers to perform one or more functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on service-provider/retailer authorized kiosks; (iv) purchase advertisement slots on service-provider/retailer authorized physical or virtual CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

396

397. The Internet-based consumer service marketing, merchandising and education/information system of claim 385, wherein said fourth subsystem enables a promoter (including a retailer, a service-provider or its agent) to create customized service promotion campaigns, containing short UPC-indexed service advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven/touch-screen enabled physical CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-

sale (POS) stations within the same retail stores in which the participating physical CPI kiosks are deployed.

391

398. The Internet-based consumer service marketing, merchandising and education/information system of claim 385, wherein said fourth subsystem enables promoters to perform one or more functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider purchasing or otherwise acquiring promotion slots on service-provider/retailer authorized kiosks; (iv) purchase or otherwise acquire (service sales) promotion slots on service-provider/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage service promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or service-providers) in retail space; and (vi) monitor the performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.